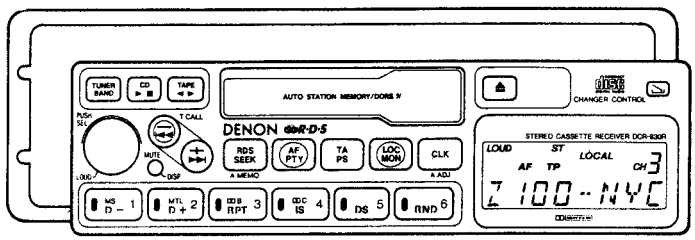
DENON

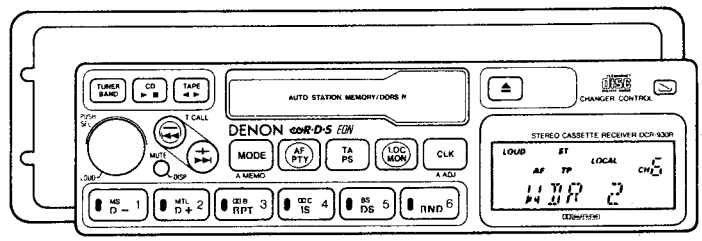
Hi-Fi Stereo Cassette Receiver

MODEL DCR-930R

STEREO CASSETTE RECEIVER



(U.S.A. Version)



(Europe Version)

NIPPON COLUMBIA CO., LTD.

(U.S.A Version)

Please carefully read all safety and operating instructions before installation and use.
It will help you to obtain the best performances from your new Cassette Receiver.

FEATURES

Power: (Both Channels Driven)

20 W × 4 ch	1 kHz/4 ohms (MAX)	
14 W × 4 ch	1 kHz/4 ohms	10% THD
10 W × 4 ch	40 Hz – 20 kHz/4 ohms	1% THD

- Detachable Front Panel.
- RDS (PS, PTY, AF, PI, TA, TP, CT).
- 30 Station-presets (18 FM – 12 AM).
- Denon Optimum Reception System IV (FM circuitry-Auto high blend and FM pulse noise canceller).
- Feather touch Full-Logic control deck.
- Dual azimuth tape head.
- Dolby B&C NR**.
- Automatic Memory System.
- Radio on during FF & REW.
- Super hard permalloy head.
- Flexible fader-internal front amp to rear amp and/or internal front amp to internal rear amp.
- Auto reverse cassette mechanism.
- Up/Down manual & seek tuning.
- Music sensor (1).
- Stereo/mono (FM), local switches.
- Metal tape switch.
- Preset scan.
- Night illumination with dash light dimmer lead.
- Power antenna control lead.
- DIN "E" with Easy Installation Lock in sleeve.
- DIN "E" & ISO mount.
- CD changer control.
  Disc/Intro Scan
  Repeat play (Disc & Track)
  2-Mode random play
  Automatic/Manual search
- Wireless Remote Control (Option)
- Quartz Clock
- Muting Switch

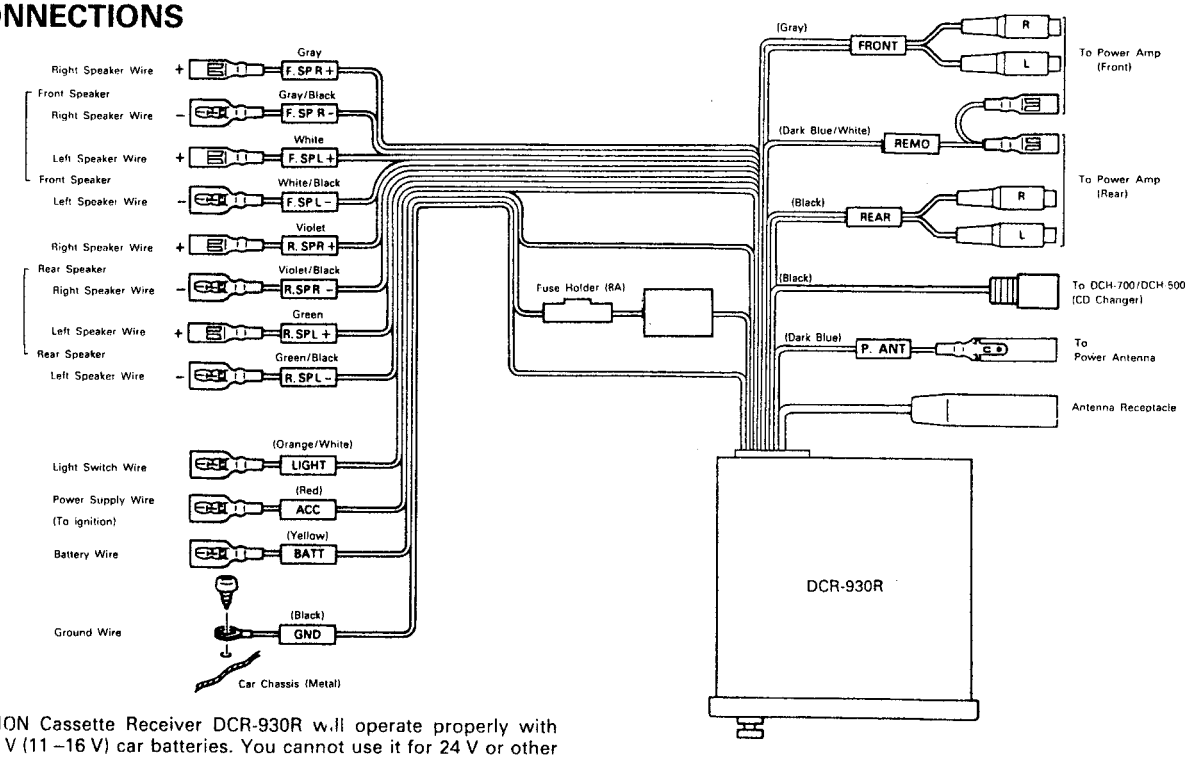
** Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⊡⊡ are trademarks of Dolby Laboratories Licensing Corporation.

FOR YOUR RECORDS

Please record the serial number of your unit in the space provided below and keep it as a permanent record. The serial number is indicated on the top of the unit.
You will need the serial number, if the need for service should arise.

Model DCR-930R
Serial Number _____

CONNECTIONS



DENON Cassette Receiver DCR-930R will operate properly with 14.4 V (11 –16 V) car batteries. You cannot use it for 24 V or other types or car batteries.
Maximum rated current capacity from Remote output and the Power antenna output is 500 mA.

* Do not use the remote output as the power supply for other sets (for example, power amplifiers, RF modulators, etc.). Connect the remote output to the power amplifier's control terminal (remote).

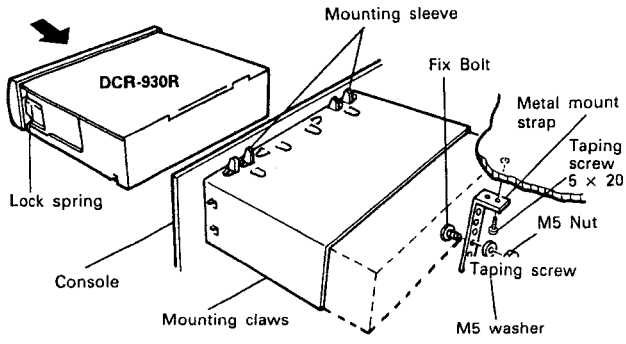
CAUTION! – To prevent damage to the unit.
DO NOT connect the (–) (negative) loudspeaker lead to the ground (chassis) or to any other (–) loudspeaker lead from this unit

* Only connect the set after connecting all the connector wires.

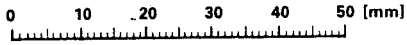
(U.S.A Version)

INSTALLATION

- Use screws supplied as accessories when installing the unit.



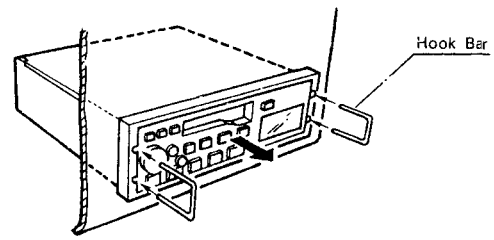
1. Insert the mounting sleeve in the console or dashboard then fasten it to the console with the mounting claws.
2. Insert the unit into the mounting sleeve then check that it is fastened to the mounting sleeve with the lock springs on either side.
3. Fasten the back of the unit to part of the vehicle using the metal mounting strap.



ACCESSORIES

No.	Part name	Q'ty
①	Hook Bar	2
②	M5 Washer	1
③	Tapping Screw 5×20	1
④	M5 Nut	1
⑤	Fix. Bolt	1
⑥	Metal Mount Strap	1
⑦	16P-Wire Ass'y	1
⑧	Carry Case	1

- **To remove the unit**



1. Remove the metal mounting strap fastening the back of the unit from the unit.
2. Insert the Hook Bar into the hole in the panel and pull the unit out.

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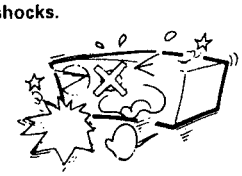
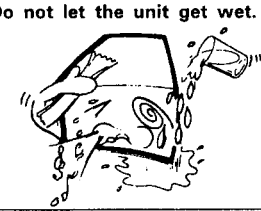
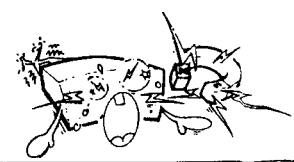
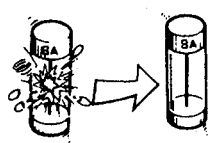
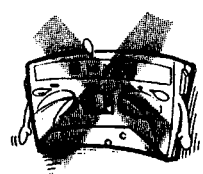
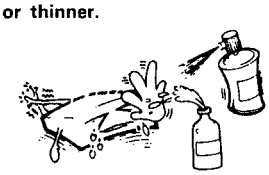
For safety, heed the following cautions. Failure to do so can lead to accidents and damage to the unit:

Do not disassemble.	**Do not subject to strong shocks.** 	**Do not let the unit get wet.** 	**Keep away from strong magnetic forces.** 
Replace the fuse with a fuse of the same amperage. 	**Do not use C-120 type tapes.** 	**Do not wipe with benzene or thinner.** 	

Precautions
- The entire preset memory is cleared if the battery cord is disconnected when replacing the battery, etc. The time is also reset to 12:00.

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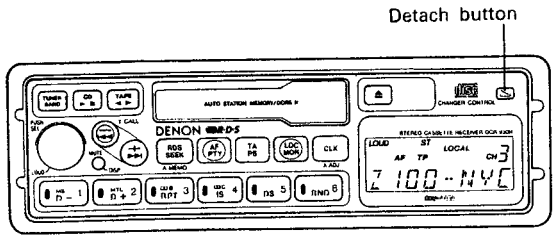
(U.S.A Version)

Using the Removable Front Panel

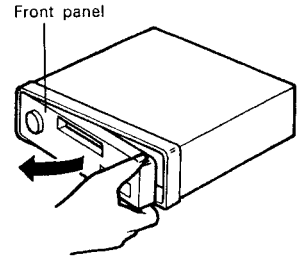
The front panel of this unit can be removed to prevent theft.

Detaching the Front Panel

1. Press button ⏏ , and the right-hand side of the panel will eject.

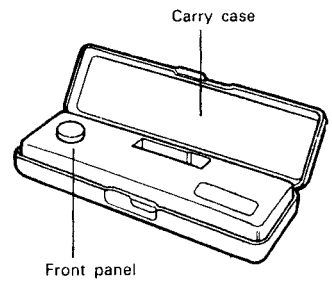


2. To remove the front panel, pull its right-hand side toward you.



- Take care not to put pressure on the display or drop the front panel.

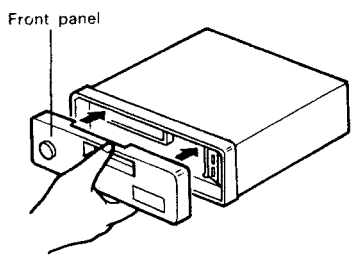
3. Enclose the front panel in the supplied carry case for safekeeping.



Replacing the Front Panel

Push the front panel into the main body.

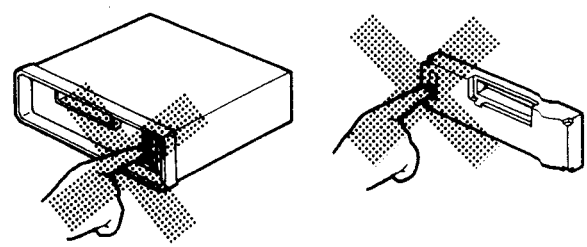
- When replacing the front panel, do not put pressure on the display or control buttons.



- Note that if the front panel is not attached correctly, pushing button ⏏ may not release the panel, and the other control buttons may not function.

Precautions

- Do not touch the contacts on the front panel or on the unitbody, since this may result in poor electrical contact. If dirt or other foreign substances get on the contacts, wipe them with a clean, dry cloth.

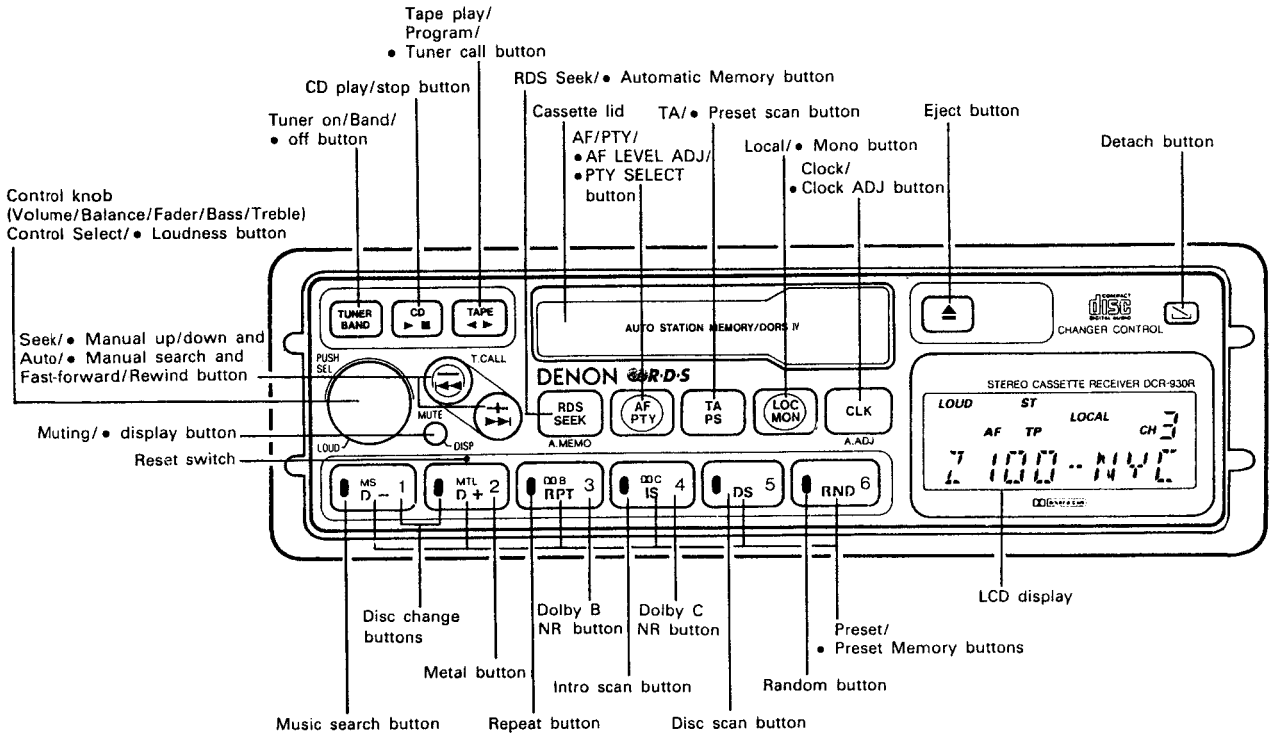


Precautions When Handling the Front Panel

- Do not leave the front panel in any area exposed to high temperatures or direct sunlight.
- Do not drop the front panel or otherwise subject it to strong impact.
- Do not allow such volatile agents as benzine, thinner, or insecticides to come into contact with the surface of the front panel.
- Never try to disassemble the front panel.

(U.S.A Version)

CONTROLS & INDICATORS



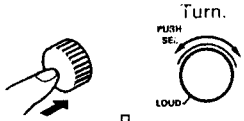
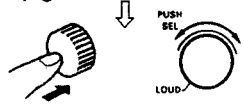
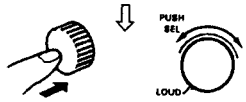
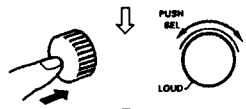
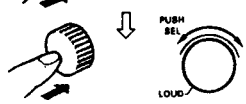
To use the functions marked "•", press the button for over two seconds.

Control knob operation

- The control knob normally adjusts the volume when turned. Press the control knob to switch the adjustment mode in the following order:

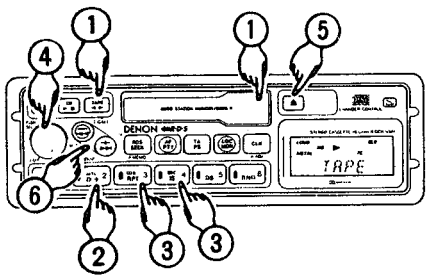
→ Volume → Balance → Fader → Bass → Treble →

- The control knob returns to the volume adjust mode five seconds after the last adjustment has been made.

Turn.	Example of LCD display	Mode	Operation
	VOL 17	Volume	• Turn the knob clockwise to increase the volume, counterclockwise to decrease the volume.
	BAL L+05	Balance	• Turn the knob clockwise to shift the balance to the right side, counterclockwise to shift the balance to the left side.
	FAD F+15	Fader	• Turn the knob clockwise to shift the balance to the front side, counterclockwise to shift the balance to the rear side.
	BASS +06	Bass	• Turn the knob clockwise to increase the bass, counterclockwise to decrease the bass.
	TREB -04	Treble	• Turn the knob clockwise to increase the treble, counterclockwise to decrease the treble.
Press (for at least two seconds).		Loudness	• When this button is pressed for more than 2 seconds, the bass and treble are emphasized, making for a more powerful sound. This can be used to make the sound more listenable at low volume levels.

(U.S.A Version)

Listening to Cassette Tapes

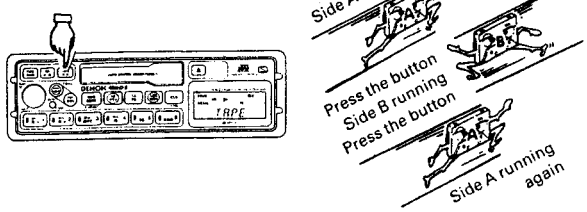


1 Insert the cassette tape. (If a cassette tape is loaded, press the [TAPE] button.)
"TAPE" will be indicated on the display.
2 When using metal tapes, press the [METAL] button. "METAL" appears on the display.
3 Press the [DOLBY B] button when listening to tapes recorded in Dolby B, the [DOLBY C] button when listening to tapes recorded in Dolby C.
"DOLBY B" or "DOLBY C" appears on the display.
4 Adjust the volume knob to the desired volume.
5 Press the eject button to eject the cassette tape.
6 Press the ⏩ button to fast-forward the tape, the following will appear on the display.
"▷ (flash)" for fast-forward in the forward direction.
"◁ (flash)" for fast-forward in the reverse direction.
Press the ⏪ button to rewind the tape, the following will appear on the display.
"(flash) ◁ ▶" for rewind in the forward direction.
"◀ ▷ (flash)" for rewind in the reverse direction.
• Always remove the cassette tape from the unit when not in use.

Convenient Functions for Cassette Tapes

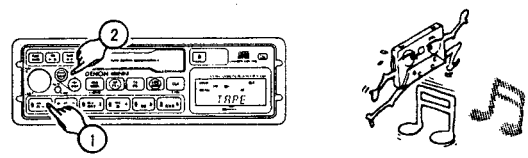
Auto Reverse Function

Press the [TAPE] button for auto reverse. This lets you to listen to the other side of the tape.



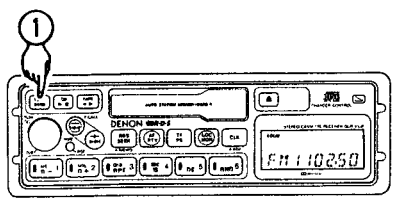
Search Function

1 Press the [MEMORY] button and check that "MS" appears on the LCD.
2 (1) Press the rewind (⏪) button to return to the beginning of the current selection.
(2) Press the fast-forward (⏩) button to move to the beginning of the following selection.



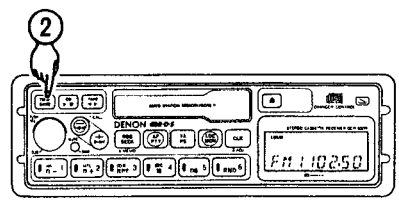
Listening to the Radio

1 Press [TUNER BAND] button to turn the tuner on.



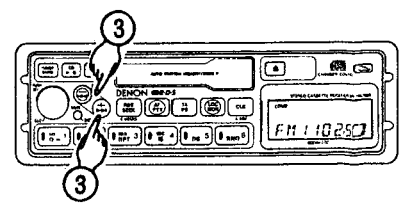
• Press the [TUNER BAND] button for at least two seconds to turn the tuner off.

2 Press the [TUNER BAND] button to select one of the FM or AM bands.



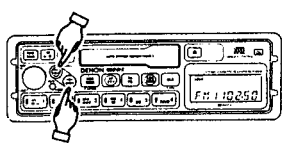
FM1 → FM2 → FM3 → AM1 → AM2

3 Use the seek buttons to set the desired frequency.
There are two ways to adjust the frequency, as explained below.

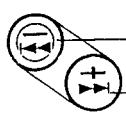


"ST" appears on the display when a stereo broadcast is received.

(1) Seek Tuning



Press the ⏪ or ⏩ button to begin auto seek tuning.

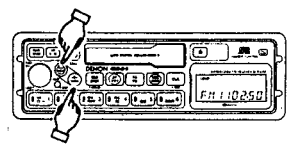


Press this button to move to lower frequencies. Tuning stops automatically when a station is found.

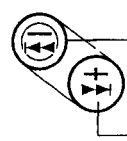
Press this button to move to higher frequencies. Tuning stops automatically when a station is found.

Tuning will not stop at stations whose signals are weak. To tune in such stations, use manual tuning.

(2) Manual Tuning



Press the ⏪ or ⏩ button for at least two seconds to begin manual tuning.



The frequency decreases in steps of 200 kHz for FM and 10 kHz for AM each time this button is pressed.

The frequency increases in steps of 200 kHz for FM and 10 kHz for AM each time this button is pressed.

(U.S.A Version)

Convenient Functions for the Tuner

Presetting of 18 FM Stations and 12 AM Station

18 FM stations, and 12 AM stations can be preset at buttons 1 to 6 then tuned in directly.

Example: Preset 102.5MHz at preset button 1 for FM1:

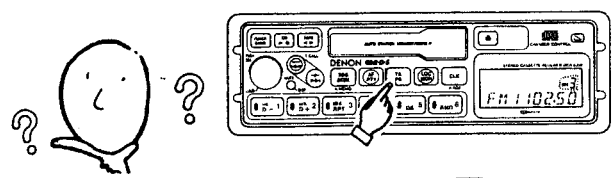
1 Tune in FM1 102.5MHz using the seek tuning or manual tuning method.
2 Press preset button 1 ( ) and hold it in for at least two seconds.
3 After about two seconds, a "beep" is heard.
4 "CH1" appears on the display. The station is now preset in the memory.

(Use this procedure to store other stations. To tune in preset stations directly, simply press the button at which the station was stored.)

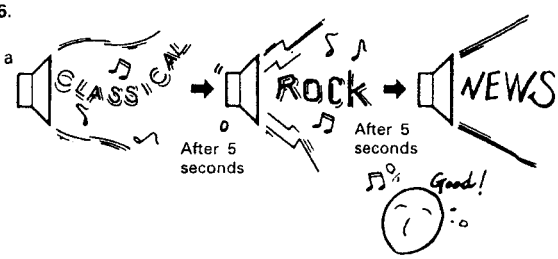
Presetting Scanning

This function lets you check the stations stored at preset buttons 1 to 6.

Example: When you have preset a classical music station, a rock station and a news station but have forgotten:



What did I store at preset buttons 1 to 6? Press the button for at least two seconds.

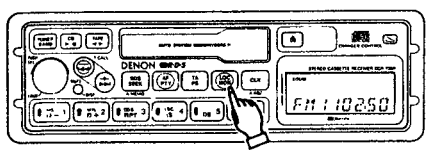


The stations are received in order for 5 seconds each.

12

Local Function

Use this to search for only stations with strong signals when tuning in the seek mode.

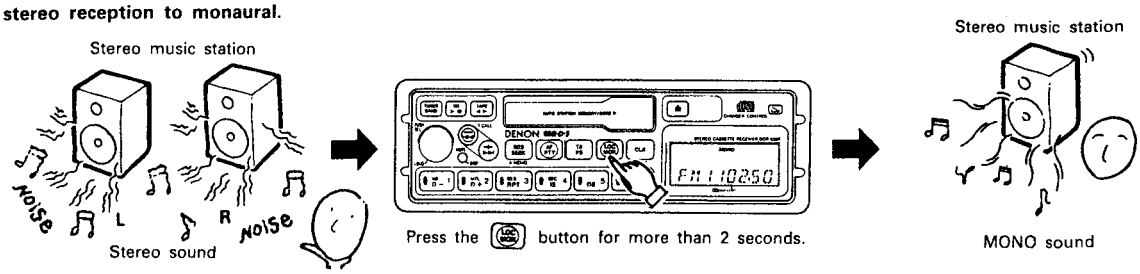


Your DENON Car Tuner is equipped with the most advanced mobile tuning circuitry available. You may also find using the LOCAL button under very high signal strength situations desirable when turning by SEEK mode.
"LOCAL" will be indicated on the display.

- Press the button.

Mono Function (Auto/Mono Selection)

This function is used at the time of FM reception when the stereo broadcast is hard to hear or when there is noise interference. It changes the stereo reception to monaural.



- Even when the MONO button is used, there are occasions when the sound is not improved, depending on the reception conditions.

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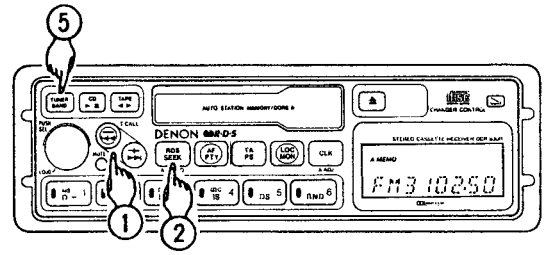
(U.S.A Version)

Using the Automatic Memory System

Use this function in areas where you do not know the frequencies of stations to automatically find stations and store them at the preset buttons.
The stations are automatically stored at the FM3 and AM2 bands, so if you store the stations you normally listen to at the FM1, FM2 and AM1 bands, this function lets you quickly find stations in different areas without clearing the stations you normally listen to.

1 Use the ⏪ and ⏩ buttons to select the frequency from which you want to start searching.
2 Press the [RDS SEEK] button and hold it in for at least 2 seconds.
3 "A.MEMO" appears on the display. The band automatically switches to FM3 for FM, AM2 for AM, and the stations with the best reception are stored in order at preset buttons 1 to 6.
4 Once the stations with the best reception are stored for the FM3 (AM2) band, the "A.MEMO" indicator turns off.
5 Use the [TUNER BAND] button to switch back to the FM1, FM2 or AM1 band.



NOTE:
- Stations can also be stored manually for the FM3 and AM2 bands. However, when the automatic memory function is used, these stations are replaced by the new stations with the best reception.
- If there are fewer than six stations with good reception, the number of the fast preset button at which a station was stored is indicated on the display.
- In rare cases, it may happen that no stations are stored when the automatic memory function is used, due to poor reception conditions, etc.

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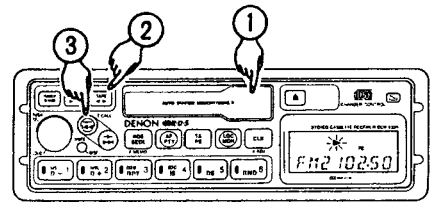
Using the Radio on during FF & REW (Tuner call)

Using the Radio-on Function During the Fast Forward or Rewind Operation.
This function allows you to receive FM/AM broadcasts when you are listening to a tape and you fast forward or rewind the tape. Music will continue (from the radio) when you fast forward or rewind the tape.

1 Load the cassette tape.
2 Press the [TAPE] button for more than 2 seconds. "TC" appears on the display.
3 Press the fast forward or rewind button.
4 Select your desired braodcast station with the [TUNER BAND] button and the ⏪ or ⏩ buttons.
5 When finished fast forwarding or rewinding, the unit will play back the tape.



NOTE:
- When the radio is operating during fast forwarding or rewinding, pressing the [TAPE] button for more than 2 seconds will cancel the function which switches to the radio during fast forwarding or rewinding the tape.
- When "MS" is selected with the [M-1] button (which means during the cuing operation), fast forwarding or rewinding will not cause a switch to the radio.

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(U.S.A Version)

Radio Data System (RDS)

RDS is a new FM broadcasting system promoted by the National Radio System Committee. Inaudible control signals are transmitted with the subcarrier to automate FM reception and maximize operating ease. With RDS, the tuner can display the call name of the currently received station or search automatically for the strongest transmitter signal with the same or any specified program. These features are highly useful also for receiving traffic information or ensuring optimum reception in a car.
At present radio stations in many markets have already started to broadcast with RDS signals, and many more stations are expected to start broadcasting soon.

RDS Services

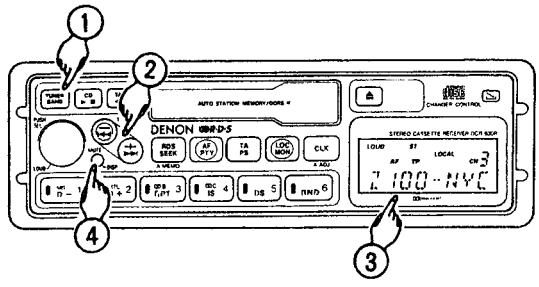
The DENON cassette receivers DCR-930R are equipped for RDS broadcast reception and offer the following features:

- **Program Service Name (PS)**
  The name of the RDS station currently received is shown on an 8-character display.
- **Program Type Identification (PTY)**
  The DCR-930R includes a PTY function that lets you select a station by specifying the type of program you want to listen to: Country, Jazz, Top 40, etc. PTY then automatically tunes in to a station broadcasting the type of program specified. As many as 22 different user selectable program identifications are provided.
- **Alternative Frequencies (AF)**
  Some RDS stations broadcast the same radio program on different frequencies.
  When the AF function is activated, the DCR-930R will automatically seek out the stronger signal of a station whenever the signal strength changes. This feature ensures stable reception at all times.
- **Program Identification (PI)**
  The PI function permits broadcast station identification. When storing stations in the preset memory, the DCR-930R stores the PI code along with the station's frequency. When a station is then selected and its field strength is unsufficient, the unit automatically selects a station with a higher field strength (and the same PI code).
- **Traffic Announcement Identification (TA)**
  The TA function automatically selects a station which broadcasts traffic information. Even during CD or cassette playback, the DCR-930R will automatically switch to this station whenever a traffic announcement is broadcast.
- **Traffic Program Identification (TP)**
  If the station currently received is one which carries traffic information, the TP indicator on the display lights up.
- **Clock Time (CT)**
  RDS stations usually broadcasts the current time for added convenience. The CT function also lets you easily make adjustments between daylight savings time and standard time.

Using the RDS (Radio Data System)

- The RDS functions are for the FM band only, and will only work on stations that are broadcasting with the RDS service.
- Not all RDS stations offer all the RDS services listed on the previous page. Some RDS stations may only provide some of the RDS services.
- The RDS functions may not work properly when the reception is poor.

PS (Program Service Name) Function



Displaying the PS (Program Service Name) on the LCD

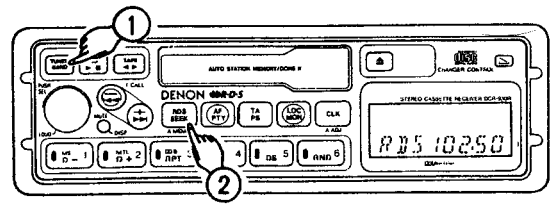
1 Press the [BAND] button and select FM1, FM2 or FM3.
2 Use the seek/manual up/down buttons to tune in the desired station.
3 After the frequency of the station being received appears on the display, the display switches to the PS (Program Service Name), if the station being received is an RDS station.
4 To check the frequency of the station being received, press the [DISPLAY] button and hold it in for two seconds. The display changes to the frequency. Three seconds later, the PS (Program Service Name) reappears. When in the PTY mode, however, the PTY code appears after the frequency is displayed before the PS reappears.

<Notes on Using the PS Function>

1) The PS (Program Service Name) is not displayed if the station being received is not an RDS station or if its signals are weak.
2) The PS (Program Service Name) is only displayed for the FM1, FM2 and FM3 bands, not for the AM1 and AM2 bands.
3) The PS (Program Service Name) is always displayed for the FM1, FM2 and FM3 bands.

(U.S.A Version)

RDS Search



Use this function to automatically tune in stations with RDS broadcasts.

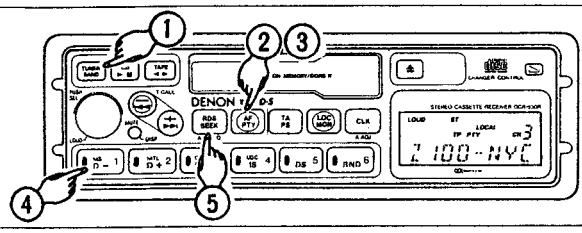
1 Press the [TUNER BAND] button and select the FM1, FM2 or FM3 band.

2 Press the [RDS SEEK] button to automatically search for stations with RDS broadcasts. When an RDS station is tuned in, the station's name appears on the display.

<Notes on RDS Search Function>

This button has a slightly different function if the PTY or TA function is switched on.

PTY (Program Type) Function

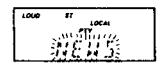


Use this function to automatically tune an RDS station broadcasting a certain type of program.

1 Press the [TUNER BAND] button and select the FM1, FM2 or FM3.

2 Press the [AF/PTY] button twice, and check that the "PTY" indicator has appeared on the display.

3 Press the [AF/PTY] button for at least two seconds and check that the indicator on the display has started to flash. (The program type mode is selected.)



4 Press the [TUNE -] or [TUNE +] button to select the type of program.

- The program type changes each time the [TUNE -] or [TUNE +] button is pressed.
- See the following page for a list of the program types which can be selected.

5 Press the [RDS SEEK] button.

6 An RDS station of the type you have selected is automatically tuned in.

- "PTY SEEK" and the selected program type are displayed alternately while a station is being tuned in.
- It is not possible to tune in stations broadcasting the type of program you have selected but not offering RDS services, or RDS stations which do not offer the PTY service. At this moment a "beep" sound is heard.

PTY (Program Type) Function

- **Tuning in RDS stations broadcasting a certain type of program using the preset buttons:**

1 Press the [AF/PTY] button twice, and check that the "PTY" indicator has appeared on the display.

2 Use the above procedure to tune in an RDS station playing the desired type of program.

3 Press a preset button for at least two seconds to store the RDS station at that button. (Refer to Page 12.)

- The PTY code is stored in the memory along with the frequency and the station name.

4 Press the preset button. The PTY code stored in the preset memory is displayed on the display for five seconds.

- If the "PTY" indicator is not displayed on the display, the PTY code is not displayed, and the station name or frequency is displayed.

5 Press the [RDS SEEK] button.

6 An RDS station broadcasting the type of program you have selected is tuned in.

<Note on tuning in RDS stations using preset PTY codes>

If you have already entered an RDS stations in a preset memory, the unit will remember what the PTY of this station is, and will allow you to tune in another RDS station broadcasting the same PTY code.

Example If you already have a "NEWS" station entered in preset 4, and you want to find another "NEWS" station:

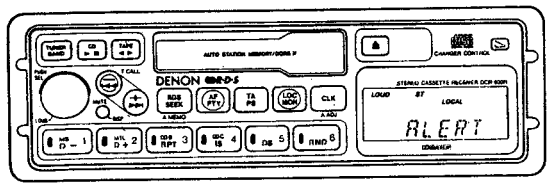
1) Push [4] button.

2) Make sure that PTY mode is selected and shows on the display. (If it is not, push the AF/PTY button until "PTY" is shown on the display)

3) Push the [RDS SEEK] button. The unit will search for another RDS station with the "NEWS" PTY code.

(U.S.A Version)

Emergency Program Reception Function



If the RDS station being received on the FM1, FM2 or FM3 band transmits an Emergency code, "ALERT" appears on the display and a beep tone is heard.
During an emergency broadcast, the volume on the unit will turn up even if the volume knob is set to the minimum. Also, if the unit is in the Cassette, or CD mode, the unit will automatically switch to the radio, indicating an emergency. Follow the instructions being broadcast.

- This function will only work when receiving RDS stations (stations with program service names). In addition, it may not work properly if the signals of the station being received are weak.
- There are no buttons for the Emergency operation.
- This function will only work during actual emergency broadcasts, and will not work during tests of the emergency broadcast system.

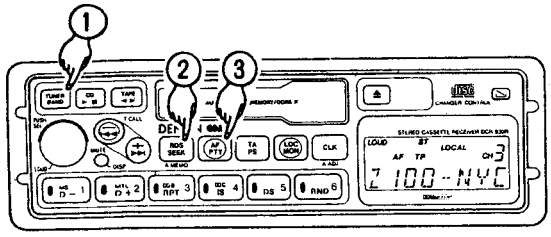
List of PTY Program Types

DISPLAY	PROGRAM TYPE	DISPLAY	PROGRAM TYPE
NO RDS*	(The station being received is not an RDS station or its signals are weak.)	SOFT	Soft (Easy)
NO PTY*	No program type	NOSTALGA	Nostalgia (Standards)
NEWS	News	JAZZ	Jazz
INFORM	Information	CLASSICL	Classical (Fine Arts)
SPORTS	Sports	R+B	R&B (Urban)
TALK	Talk	SOFT R+B	Soft R&B
ROCK	Rock	LANGUAGE	Language (Ethnic)
CLS ROCK	Classic Rock	REL MUSC	Religious Music (Gospel)
ADLT HIT	Adult Hits	REL TALK	Religious Talk (Teaching)
SOFT RCK	Soft Rock	PERSNLTY	Personality (Full Service)
TOP 40	Top 40	PUBLIC	Public (NPR)
COUNTRY	Country	ALERT*	Emergency
OLDIES	Oldies (Gold)		

* Cannot be selected in the program type selection mode.

(U.S.A Version)

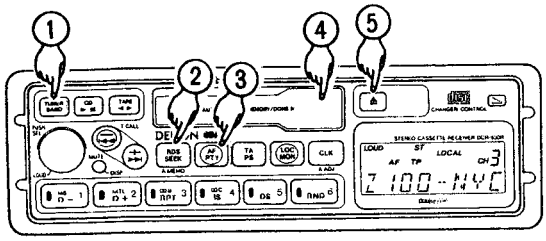
AF (Alternative Frequency) Function



To constantly receive RDS stations broadcasting the same program on multiple frequencies

1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Press the [RDS SEEK] button to tune in an RDS station.
3 Press the [AF PTY] button until "AF" appears on the display.

- When the signal strength of the station being received becomes weak, "AF" flashes on the display, and the unit searches for another station that is broadcasting the same program based on the AF code list.
- The frequency changes if another station broadcasting the same program is found.



Automatically tracking stations broadcasting the same program on different frequencies while playing a cassette tape so that reception is optimized when switching back to the tuner

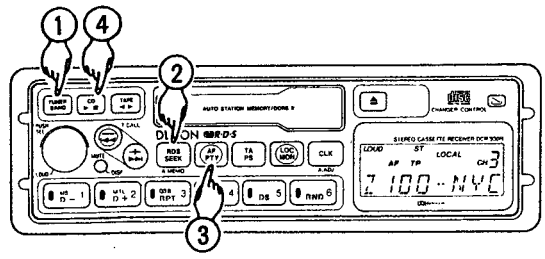
1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Press the [RDS SEEK] button to tune in an RDS station.
3 Press the [AF PTY] button until "AF" appears on the display.
4 Insert a cassette tape.

- When the signal strength of the station being received becomes weak, "AF" flashes on the display, and the unit searches for another station that is broadcasting the same program based on the AF code list.
- The frequency changes if another station broadcasting the same program is found.

5 When the [▲] button is pressed, or if the [TUNER BAND] button is pressed, the radio plays the same radio program as before, using the frequency on the AF code list with the best reception.

22

AF (Alternative Frequency) Function (When using the optional DCH-700/500 CD-Changer)



Automatically tracking stations broadcasting the same program on different frequencies while using the CD-changer so that reception is optimized when switching back to the tuner

1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Press the [RDS SEEK] button to tune in an RDS station.
3 Press the [AF PTY] button until "AF" appears on the display.
4 Press the [CD ▶/■] button and start CD playback.

- When the signal strength of the station being received becomes weak, "AF" flashes on the display, and the unit searches for another station that is broadcasting the same program based on the AF code list.
- The frequency changes if another station broadcasting the same program is found.

5 When the [CD ▶/■] button is pressed, or if the [TUNER BAND] button is pressed, the radio plays the same radio program as before, using the frequency on the AF code list with the best reception.

AF (Alternative Frequency) Function

<Notes on Using the AF Function>

1) With the AF function, the AF button is pressed and stations broadcasting the same program as the station currently being received are searched for based on the AF list. The AF list includes stations broadcasting the same program. If no receivable station is found when the list is checked through 10 times, stations are searched for using the PI codes (codes for stations broadcasting the same program) and a beep tone is sounded. This operation is then repeated. Thus, in areas far from the broadcasting stations, the alternative frequency function may not work.
2) When presetting, both the program name, PI codes, AF list and PTY code are stored along with the station's frequency for buttons M1 to M6 on the FM band.
3) The sound may be interrupted once ever 10 seconds after the [AF PTY] button is pressed while the station with the best reception is being searched for based on the AF list. This is not a malfunction.
4) "AF LEV n" (n = 0 to 7) appears on the display if the [AF PTY] button is pressed for over 2 seconds. Now use the [1 ▼] and [2 ▲] buttons to change the value of "n" and the strength of the signals at which the alternative frequency function will begin operating.
The lower the value of "n", the weaker the signals of the station being received must be before the AF function begins operating.
5) "AF" flashes on the display if the signals of the station being received become weak and the data cannot be identified.
6) The AF function may not work properly for RDS stations which don't transmit AF lists.

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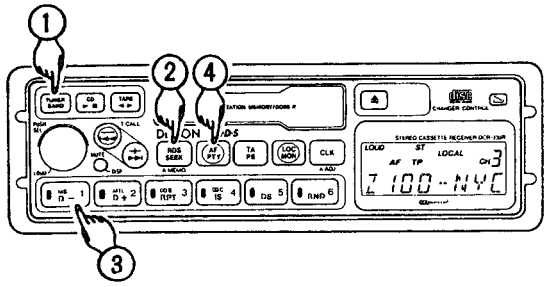
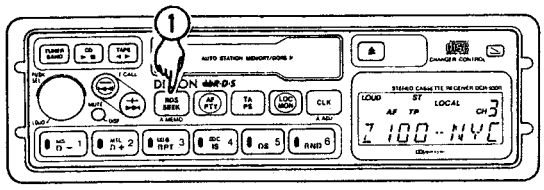
(U.S.A Version)

AF (Alternative Frequency) Function / PI (Program Identification) Function



Storing the AF lists and PI codes in the preset memory

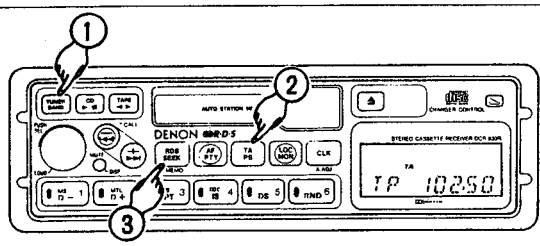
1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Press the [RDS SEEK] button to tune in an RDS station.
3 Press the preset memory button (M1 to M6) at which you want to store that station and hold it in for at least 2 seconds.
4 Press the [AF (PTY)] button until "AF" appears on the display.
5 When a preset button at which the AF list or PI codes was stored is pressed, the AF or PI search operation is performed automatically. The stored broadcast stations and broadcast stations carrying the same content are searched for based on the AF list.



If no new broadcast station with strong signals is found when the [AF (PTY)] button is pressed

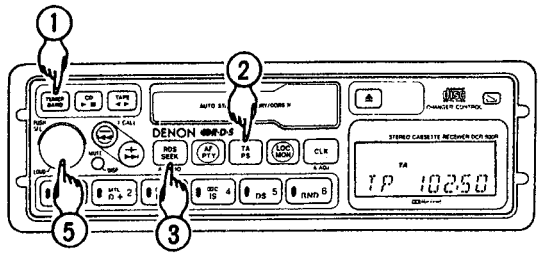
1 Press the [RDS SEEK] button to seek for a new RDS station.
2 Tune in an RDS station.

TA (Traffic Announcement) Function



Searching for TP (Traffic Program) broadcast stations automatically

1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Press the [TA PS] button. "TA" appears on the display.
3 Press the [RDS SEEK] button.
4 Tuning automatically stops at an RDS station broadcasting traffic information. "TP" appears on the display and the TP station is received.

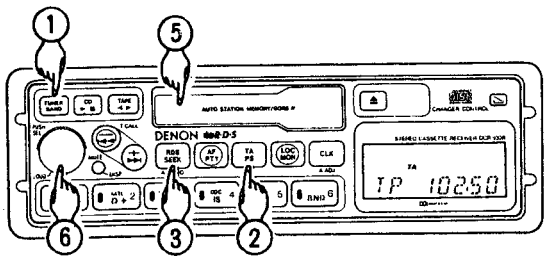


Setting the volume when a TA (traffic information announcement) starts while in standby (on FM1, FM2 or FM3)

1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Press the [TA PS] button. "TA" appears on the display.
3 Press the [RDS SEEK] button.
4 Tuning automatically stops at an RDS station broadcasting traffic information and that station is received.
5 When a traffic announcement begins, the volume is set to the level at which it was set the last time a traffic announcement was received (the TA level). "TA VOL" appears on the display if the volume is adjusted at this time.
6 The TA level can be changed by changing the volume when traffic information is being broadcast. Also, when the next traffic information is tuned in, it is played at the previously set volume level.
7 The volume returns to the original level once the traffic announcement is over.

(U.S.A Version)

TA (Traffic Announcement) Function



Automatically listening to traffic information announcements while playing cassette tapes

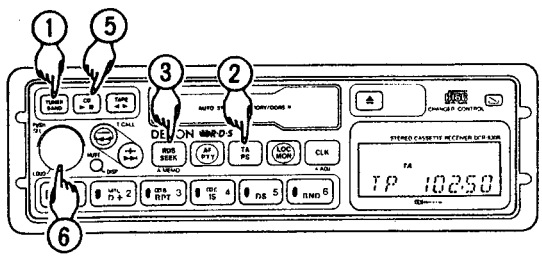
1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Press the [TA PS] button. "TA" appears on the display.
3 Press the [RDS SEEK] button.
4 Tuning automatically stops at an RDS station broadcasting traffic information and "TP" appears on the display.
5 Insert a cassette tape.
- If a traffic information announcement is being broadcast when the cassette tape is inserted, the tape is not played.

6 Use the control knob to adjust the volume of the cassette tape.
- When the traffic information announcement starts, tape play is set to the pause condition and the set automatically switches to the traffic information.

<Notes on Using the TA Function>

1) With the TA function, the TA button is pressed and stations broadcasting the same program as the station currently being received are searched for based on the AF list. The AF list includes stations broadcasting the same program. Thus, in areas far from the broadcasting stations, the alternative frequency function may not work.
2) A beep tone is sounded if there is no station broadcasting a Traffic Program or if its signals are weak. If this happens, press the [TA PS] button again so that "TA" disappears from so that "TA" disappears from the display, then wait until entering an area in which a station broadcasting TPs can be received and press the [TA PS] button again, then press the [RDS SEEK] button to tune in a traffic information station.
3) "TA" flashes on the display if the signals of the station being received become weak and the data cannot be identified.
4) Some stations broadcast TA (traffic announcement) signals even when they are not broadcasting traffic information announcements. In such cases, the TA function will not work properly.

TA (Traffic Announcement) Function (When using the optional DCH-700/500 CD-Changer)

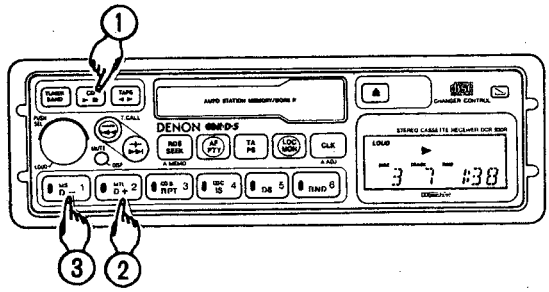


Automatically listening to traffic information announcements while using the CD changer

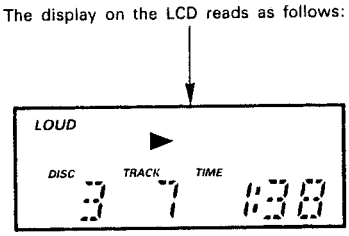
1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Press the [TA PS] button. "TA" appears on the display.
3 Press the [RDS SEEK] button.
4 Tuning automatically stops at an RDS station broadcasting traffic information and "TP" appears on the display.
5 Press the [CD] button.
6 Use control knob to adjust the volume of the CD changer.
- When the traffic information announcement starts, CD play is set to the pause condition and the set automatically switches to the traffic information.

(U.S.A Version)

CD Changer Operation (Please connect DCH-700/500)



The display on the LCD reads as follows:



1 CD PLAY/STOP BUTTON
Pushing this button will start the CD play.
The "▶" sign and the currently playing disc number, track number and track time will be displayed on the display.
Pushing this button once again will stop the CD play.

Disc Change

2 Pushing the button will advance the unit to the next disc and start the play from the first track.

3 Pushing the button will return the unit to the previous disc and start the play from the first track. The number of the changed disc is displayed on the display.

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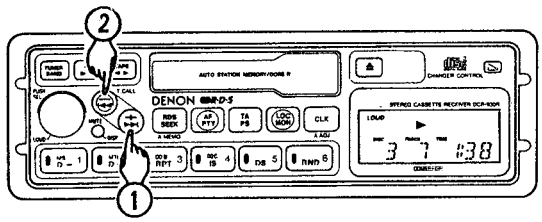
Searching for the Desired Track

(1) Automatic Search

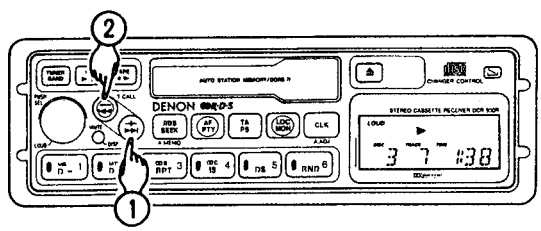


1 Pushing the button will find the beginning of the next song and resume play.

2 Pushing the button will return to the beginning of the song in play, and resume play.

- The track numbers of the songs being searched will be displayed on the display.
- Note that the manual search mode is set if the or button is pressed for more than two seconds.

(2) Manual Search



1 Continuing to push the up button for more than 2 seconds, will fast forward the disc.

2 Continuing to push the down button for more than 2 seconds, will fast reverse the disc.
At this time the sound can be heard at a lower volume than during regular playback.

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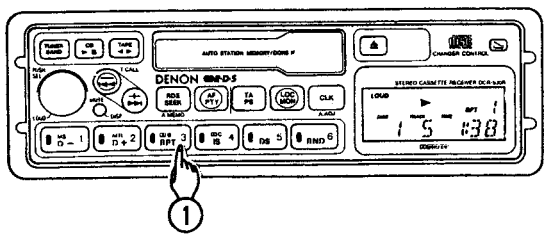
(U.S.A Version)

Repeat Play

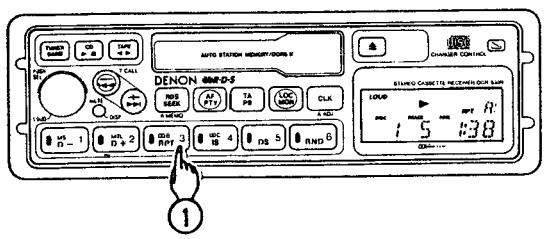
(1) One track



1 Press the [3 RPT] button once. "RPT 1" appears on the display, and the track which is currently playing is played repeatedly. Use this to play a single track repeatedly.

- To cancel the repeat function, either press the [3 RPT] button twice, or press another CD changer control button.

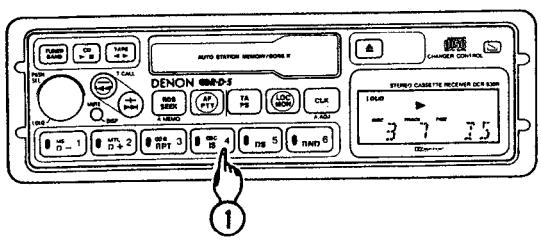
(2) One disc



1 Press the [3 RPT] button twice. "RPT A" appears on the display, and the entire disc which is currently playing is played repeatedly.
Use this to play a single CD repeatedly.

- To cancel the repeat function, either press the [3 RPT] button once, or press another CD changer control button.

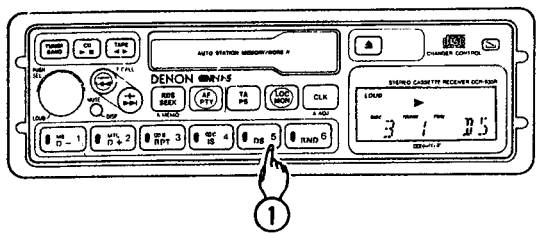
Intro Scan



1 Press the [4 IS] button. "IS" appears on the display, and the first 10 seconds of each track is played.
Use this to search for a certain track.

- To stop the intro scan function, either press the [4 IS] button again, or press another CD changer control button.

Disc Scan



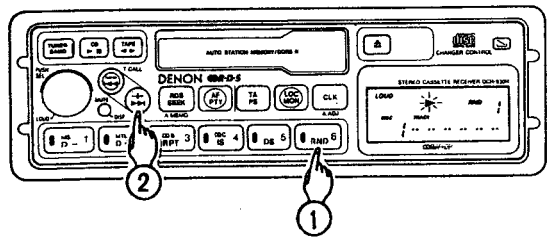
1 Press the [5 DS] button. "DS" appears on the display, and the first 10 seconds of each disc (the first track) is played.
Use this to search for a certain disc.

- To stop the disc scan function, either press the [5 DS] button again, or press another CD changer control button.

(U.S.A Version)

Random Play

(1) One disc

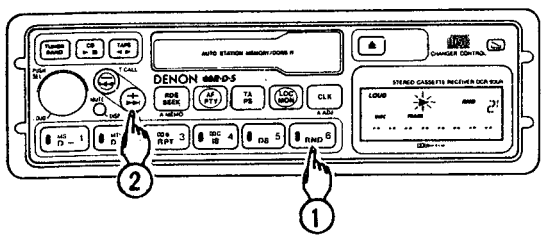


1 Press the RND 6 button once. "RND 1" appears on the display, and the tracks on the disc which is currently playing are played in random order.

2 When the button is pressed, a track selected randomly starts playing.

- To cancel the random play function, either press the RND 6 button twice, or press another CD changer control button.

(2) All discs

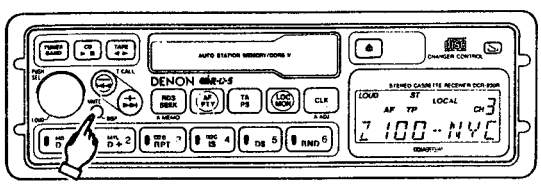


1 Press the RND 6 button twice. "RND 2" appears on the display, and all the tracks on all the discs are played in random order.

2 When the button is pressed, a randomly selected track on a randomly selected disc starts playing.

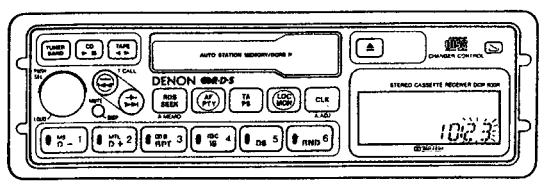
- To cancel the random play function, either press the RND 6 button once, or press another CD changer control button.

Mute Function



Press the button causes muting, reducing the sound volume. "MUTE" flashes on the display when the MUTING button is pressed. Pressing the button again cancels the display.

Time Adjustment



Time display: Pressing the button provides a time display for about 5 seconds.

1. Automatic adjustment

1) Press the button and select FM1, FM2 or FM3.
2) Press the button.
3) Tune in an RDS station.
4) Press the button for at least two seconds. The time is automatically adjusted.

- The time can only be adjusted automatically when an RDS station offering the CT service is tuned in. "NO A CLK" is displayed on the LCD if the time cannot be adjusted automatically because no CT code is being received.
- Some RDS stations do not offer the CT service.
- Automatic adjustment may not be possible when reception is poor due to the inability to receive the CT code.
- To use the automatic clock adjustment function, the unit has to be tuned to an RDS radio station for an average of 30 seconds before using this feature.

2. Manual adjustment

1) Switch off the unit with the button to press for more than 2 seconds.
2) Press the button for 2 seconds or longer. The Hour display will flash and the time adjustment mode will be set.
3) Adjust the Hour setting with the buttons.
4) Press the button. The Minute display will flash and the minute adjustment mode will be set.
5) Adjust the Minute setting with the buttons.
6) Press the button again. The time will start advancing from the adjusted time setting.

Note:

- The time is displayed with a 12-hour display; there is no A.M. or P.M. indication.
- The time cannot be adjusted manually when the set is operating.

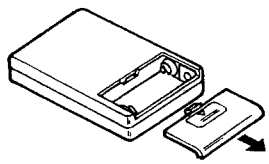
(U.S.A Version)

• WIRELESS REMOTE CONTROL (OPTION)

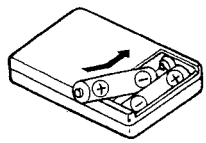
The accessory remote control unit RC-436 is used to control DCR-930R from a distance.

1. Loading the Dry Cell Batteries

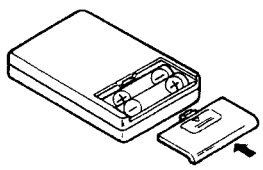
(1) Remove the rear cover on the remote control unit.



(2) Load two R03 (standard size AAA) dry cell batteries as shown in the diagram inside the battery compartment.



(3) Replace the rear cover.

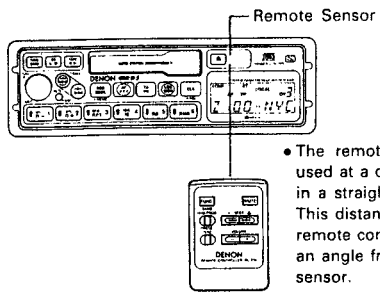


Battery Precautions

- The remote control unit uses R03 (standard size AAA) dry cell batteries.
- The batteries will need to be replaced approximately once a year. This will depend upon how often the remote control is used.
- If the remote control will not operate the In-dash player even if held at very close distance, exhausted batteries may be suspected. Replace the batteries with new ones.
- Load the batteries properly according to the illustration inside the battery compartment. Align the battery polarity (+ and –) correctly.
- Batteries are prone to damage and may start to leak. Therefore:
  - Do not combine new batteries with used ones.
  - Do not combine different types of batteries.
  - Do not jumper the opposite poles of the batteries, expose them to heat or break them open.
  - Do not dispose of used batteries in open fire. Obey local regulations on battery disposal.
- When the remote control is not to be used for a long period of time, remove the batteries from the unit.
- If the batteries have leaked, remove any battery fluid from the inside the battery compartment by wiping it out thoroughly. Then load new batteries.

2. Directions for use

- Operate the remote control unit while pointing it at the remote sensor on DCR-930R, as shown in the diagram below.



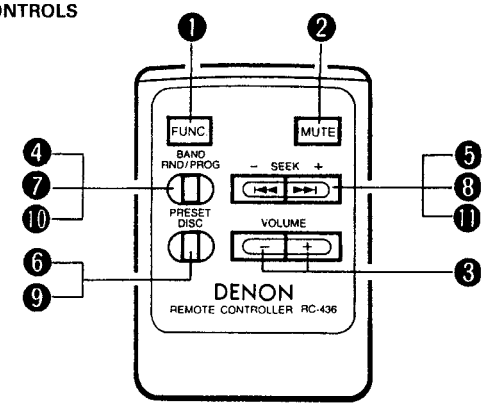
- The remote control unit can be used at a distance up to 6 meters in a straight line from DCR-930R. This distance decreases when the remote control unit is operated at an angle from the remote control sensor.

- Point the remote control unit at the remote control sensor when operating it. DCR-930R may not function if there are obstacles between remote control unit and the remote control sensor, so operate the remote control unit from directly in front of DCR-930R.

Operation Precautions

- Do not press the operation buttons on DCR-930R and the remote control at the same time. This will cause miss operation.
- Remote control operation may be impaired if the Remote Sensor on DCR-930R player is exposed to strong light (for example, direct sunlight)

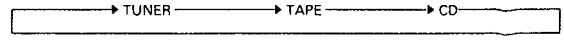
3. CONTROLS



• MAIN CONTROL

❶ FUNCTION button

This button permits switching between tuner, TAPE and CD.



Pressing this button when DCR-930R is off will switch on the tuner. This switch does not have an off function.

❷ MUTE button

Pressing this switch causes muting, reducing the sound volume. "MUTE" flashes on the display when the MUTE button is pressed. Pressing the button again cancels the display.

❸ VOLUME button

Press the + button to increase the volume.

Press the – button to decrease the volume.

(U.S.A Version)

• RADIO CONTROL

❹ BAND SELECT button

This button changes the band. (See Page 11.)

❺ SEEK TUNING button

[▶▶|] button and [|◀◀] button provide seek tuning in the direction of a higher frequency and a lower frequency, respectively. (See Page 11.)

❻ PRESET button

This button changes the channels (CH) of the preset memory. This button changes the channels in the order of CH 1 → CH 2 → CH 3···

• CD CONTROL

❼ RANDOM button

Pressing this button provides random playback.

Each press of this button advances the changer in the sequence of RND 1 → RND 2 → Normal Play (OFF). (See Page 32.)

❽ AUTOMATIC SEARCH button

Pressing the [▶▶|] button provioes an automatic search to the next track, whereas pressing the [|◀◀] button provides an automatic search to the beginning of the track currently being played.

❾ DISC CHANGE button

Pressing this button changes the disc in the direction of a larger disc number.

• TAPE CONTROL

❿ PROGRAM button

Press the BAND RND/PROG button for auto reverse. (See Page 10.)

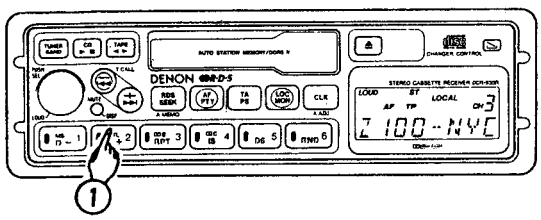
⓫ FF & Rewind button

1) Press the [|◀◀] rewind button to return to the beginning of the current selection.
2) Press the [▶▶|] fast-forward button to move to the beginning of the following selection.

Notes:

- The remote control unit will function from a distance of approximately 6 meters directly in front of the remote sensor.
- The distance from which the remote control unit will function will decrease if it is operated from an angle.
- The remote control unit may not function if there is an obstacle between it and the remote sensor.
- The distance from which the remote control unit will function will decrease if the batteries are worn.

Reset Switch



1 Reset Function
Press the reset switch using the tip of a ball-point pen, etc., when the power supply is first connected or when the display malfunctions due to external interference.

NOTES:

- Everything stored in the memory, including the stations stored at preset channels M1 to M6, is cleared when the reset switch is pressed. The time is also reset to 12:00.
- Do not press the reset switch with a sharp object, such as a metal pin.
- If the problem persists after the reset switch is pressed, contact your Denon dealer or a local Denon service center.

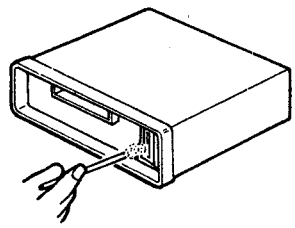
Error Displays

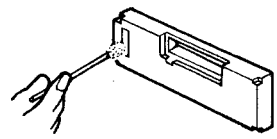
With the DCH-700/500 connected, if any of the following error displays are shown on the display when the unit is operated, carry out the measure indicated in the table.

Error display	Cause of error	Measure
NO MAG.	The disc magazine is not inserted in the changer.	Insert a disc magazine that has been loaded with discs into the changer.
NO DISC	Discs are not loaded in the disc magazine.	Remove the disc magazine and load the discs.
ERROR	The DCH-700/500 does not operate for some reason.	Push the DCR-930R reset switch
HOT	The temperature protection circuit of the DCH-700/500 has operated.	Wait until the temperature drops.
DISC REV	All of the discs in the magazine are upside-down or dirty.	Set the discs properly or wipe off the dirt.

(U.S.A Version)

Cleaning

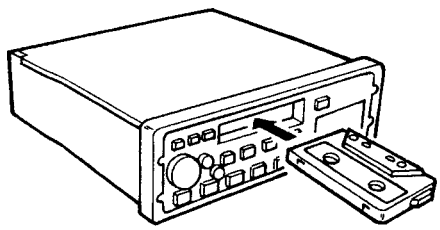




There may be a poor connection at the connector on the panel or on the set if the unit is frequently detached. Periodically wipe the connectors with a cotton swab moistened with alcohol.

* Always turn the car's accessory power supply off when cleaning.

Cleaning the tape head



When playback sound begins to deteriorate, it is time to clean the playback head. Insert a special head cleaning cassette into the tape-loading slot and allow it to run for a few minutes to remove any foreign matter.

For replacement contact your DENON dealer or local DENON service center.

SPECIFICATIONS

FM TUNER

• **Mono Usable Sensitivity**	14.8 dBf 1 µV (75 ohms)
• **50 dB Quieting Sensitivity**	20.3 dBf 2.8 µV (75 ohms)
• **Alternate Channel Selectivity**	100 dB
• **S/N (Signal to Noise Ratio)**	70 dB
• **Stereo Separation**	40 dB at 1 kHz
• **Capture Ratio**	2.5 dB
• **Image Rejection**	70 dB
• **IF Rejection**	120 dB

AM TUNER

• **Sensitivity**	30 µV (S/N 20 dB)

TAPE

• **Wow and Flutter**	0.09% WRMS
• **Stereo Separation**	37 dB at 1 kHz
• **S/N (Signal to Noise Ratio)**	72 dB (Dolby C NR)**
• **Frequency Response**	
– with METAL/CrO_2/FeCr (70 µS tape)	30 Hz to 18 kHz ±3 dB
– with NORMAL (120 µS tape)	30 Hz to 16 kHz ±3 dB

GENERAL

• **Power Output** *1	14 W × 4 ch at 1 kHz with 10% THD
• **Power Output** *2	10 W × 4 ch from 40 Hz to 20 kHz with 1% THD
• **Output Voltage – Pre-amp level**	1 V/10 k ohms
• **Bass**	±12 dB at 40 Hz
• **Treble**	±12 dB at 15 kHz
• **Loudness (Vol. –30 dB)**	+8 dB at 100 Hz +8 dB at 10 kHz
• **Remote Output**	12 V 500 mA max.
• **Power Antenna Output**	12 V 500 mA max.
• **Chassis Size (W × H × D)**	178 mm × 50 mm × 172 mm (7-1/64" × 2" × 6-25/32")
• **Panel Size (W × H × D)**	187 mm × 59 mm × 23 mm (7-23/64" × 2-21/64" × 29/32")
• **Weight**	1.8 kg (4 lbs)

*1 Power Output is per channel minimum continuous average power into 4 ohms, both channels driven, at 1 kHz, with no more than 10% total harmonic distortion.

*2 Power Output is per channel minimum continuous average power into 4 ohms, both channels driven from 40 Hz to 20 kHz, with no more than 1% total harmonic distortion.

Design and specifications are subject to change for improvement without prior notice.

(Europe Version)

Please carefully read all safety and operating instructions before installation and use.
It will help you to obtain the best performances from your new Cassette Receiver.

FEATURES

Power: (Both Channels Driven)

20 W × 4 ch	1 kHz/4 ohms (MAX)	
14 W × 4 ch	1 kHz/4 ohms	10% THD
10 W × 4 ch	20 Hz – 20 kHz/4 ohms	0.8% THD

- Detachable Front Panel.
- RDS (PS, PTY, AF, PI, TA, TP, EON, CT).
- 30 Station-presets (18 FM – 12 MW (LW)).
- Denon Optimum Reception System IV (FM circuitry-Auto high blend and FM pulse noise canceller).
- Feather touch Full-Logic control deck.
- Dual azimuth tape head.
- Dolby B&C NR**.
- Automatic Memory System.
- Radio on during FF & REW.
- Super hard permalloy head.
- Flexible fader-internal front amp to rear amp and/or internal front amp to internal rear amp.
- Auto reverse cassette mechanism.
- Up/Down manual & seek tuning.
- Music sensor (1).
- Stereo/mono (FM), local switches.
- Metal tape switch.
- Preset scan.
- Night illumination with dash light dimmer lead.
- Power antenna control lead.
- DIN "E" with Easy Installation Lock in sleeve.
- DIN "E" & ISO mount.
- CD changer control.
  Disc/Intro Scan
  Repeat play (Disc & Track)
  2-Mode random play
  Automatic/Manual search
- Wireless Remote Control (Option)
- Quartz Clock
- Muting Switch

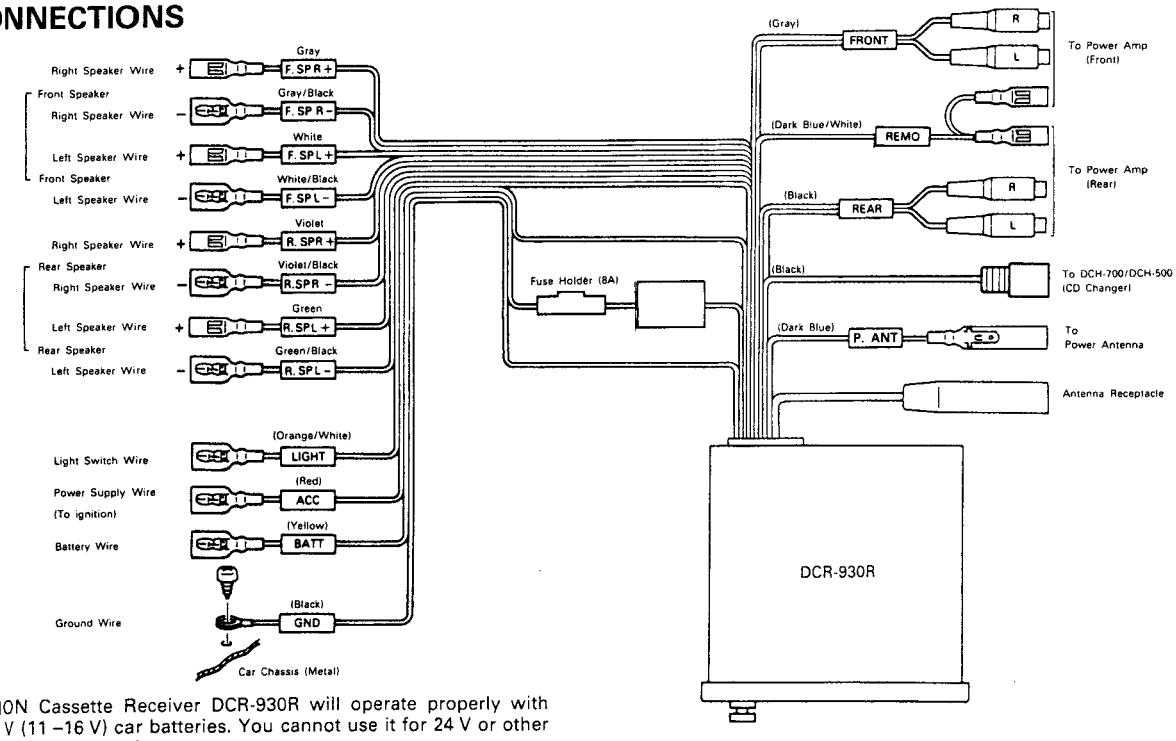
** Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

FOR YOUR RECORDS

Please record the serial number of your unit in the space provided below and keep it as a permanent record. The serial number is indicated on the top of the unit.
You will need the serial number, if the need for service should arise.

Model DCR-930R
Serial Number _____

CONNECTIONS



DENON Cassette Receiver DCR-930R will operate properly with 14.4 V (11 –16 V) car batteries. You cannot use it for 24 V or other types or car batteries.
Maximum rated current capacity from Remote output and the Power antenna output is 500 mA.

* Do not use the remote output as the power supply for other sets (for example, power amplifiers, RF modulators, etc.). Connect the remote output to the power amplifier's control terminal (remote).

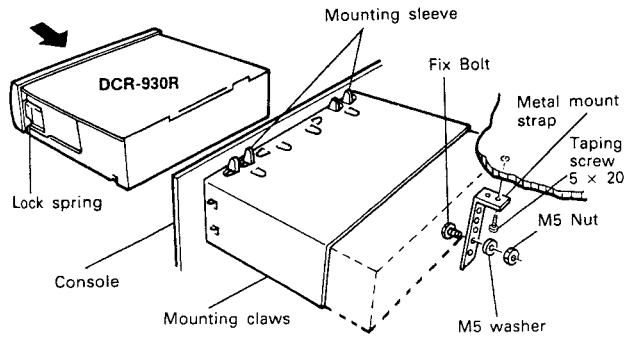
CAUTION! – To prevent damage to the unit.
DO NOT connect the (–) (negative) loudspeaker lead to the ground (chassis) or to any other (–) loudspeaker lead from this unit.

* Only connect the set after connecting all the connector wires.

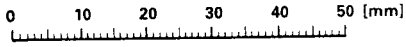
(Europe Version)

INSTALLATION

- Use screws supplied as accessories when installing the unit.



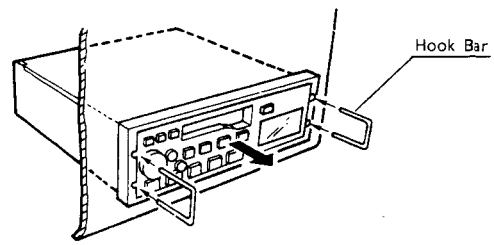
1. Insert the mounting sleeve in the console or dashboard then fasten it to the console with the mounting claws.
2. Insert the unit into the mounting sleeve then check that it is fastened to the mounting sleeve with the lock springs on either side.
3. Fasten the back of the unit to part of the vehicle using the metal mounting strap.



ACCESSORIES

No.	Part name	Q'ty
①	Hook Bar	2
②	M5 Washer	1
③	Tapping Screw 5×20	1
④	M5 Nut	1
⑤	Fix. Bolt	1
⑥	Metal Mount Strap	1
⑦	16P-Wire Ass'y	1
⑧	Carry Case	1

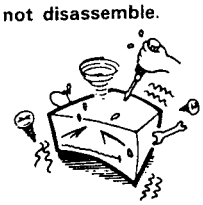
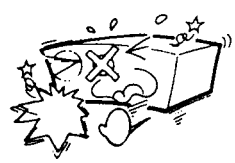
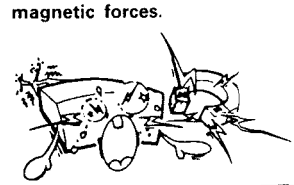
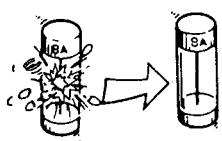
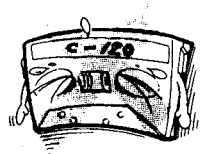
- **To remove the unit**



1. Remove the metal mounting strap fastening the back of the unit from the unit.
2. Insert the Hook Bar into the hole in the panel and pull the unit out.

4

For safety, heed the following cautions. Failure to do so can lead to accidents and damage to the unit:

Do not disassemble. 	**Do not subject to strong shocks.** 	**Do not let the unit get wet.**	**Keep away from strong magnetic forces.** 
Replace the fuse with a fuse of the same amperage. 	**Do not use C-120 type tapes.** 	**Do not wipe with benzene or thinner.**	

Precautions
- The entire preset memory is cleared if the battery cord is disconnected when replacing the battery, etc. The time is also reset to 12:00.

5

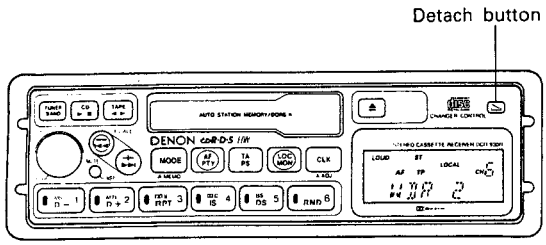
(Europe Version)

Using the Removable Front Panel

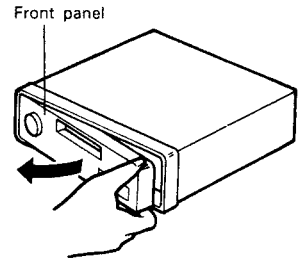
The front panel of this unit can be removed to prevent theft.

Detaching the Front Panel

1. Press button ⏏, and the right-hand side of the panel will eject.

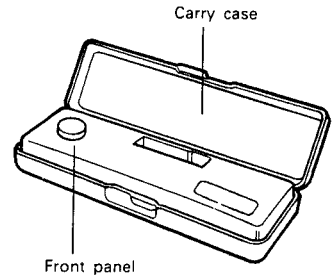


2. To remove the front panel, pull its right-hand side toward you.



- Take care not to put pressure on the display or drop the front panel.

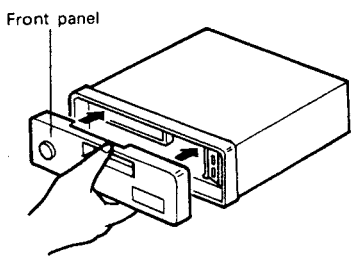
3. Enclose the front panel in the supplied carry case for safekeeping.



Replacing the Front Panel

Push the front panel into the main body.

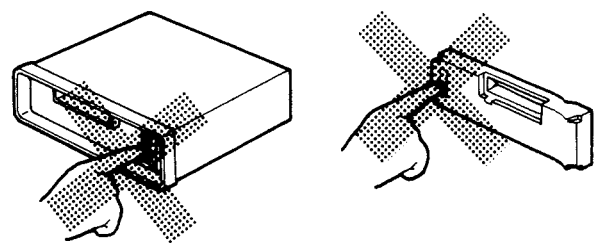
- When replacing the front panel, do not put pressure on the display or control buttons.



- Note that if the front panel is not attached correctly, pushing button ⏏ may not release the panel, and the other control buttons may not function.

Precautions

- Do not touch the contacts on the front panel or on the unit body, since this may result in poor electrical contact. If dirt or other foreign substances get on the contacts, wipe them with a clean, dry cloth.

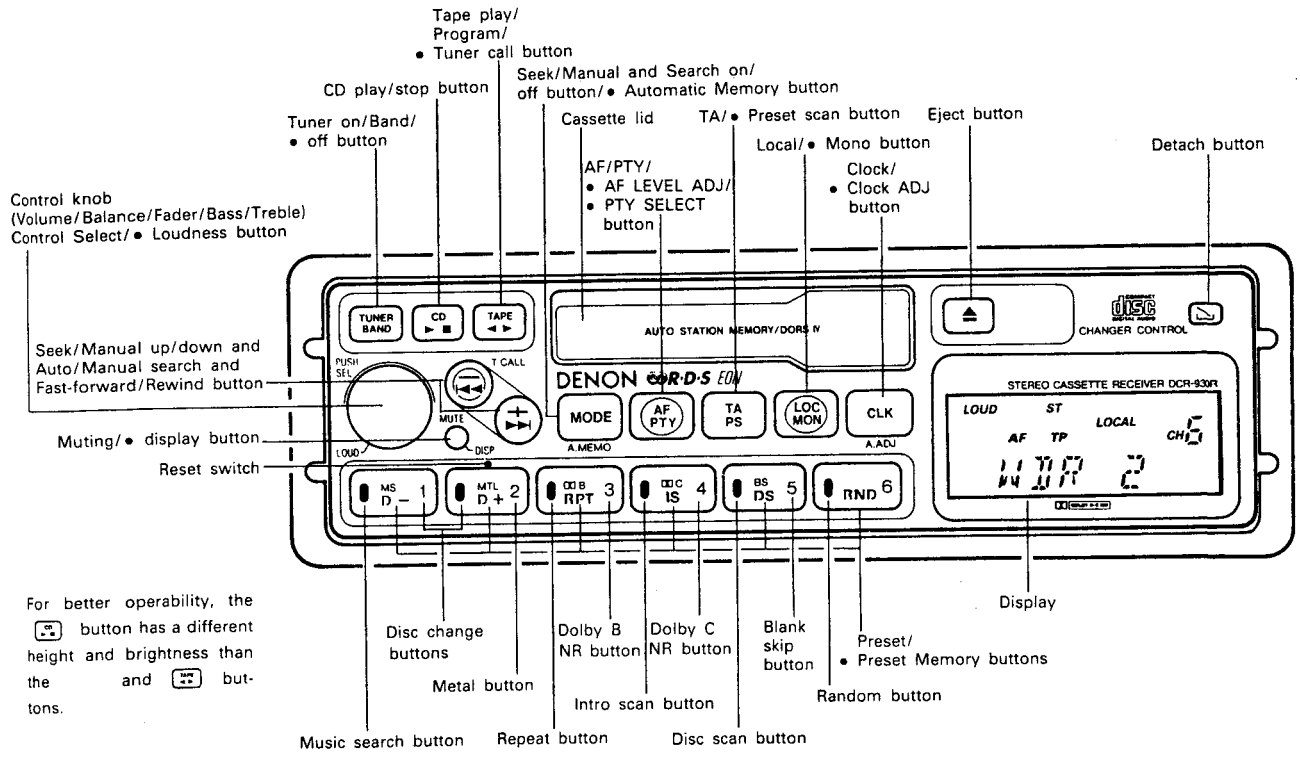


Precautions When Handling the Front Panel

- Do not leave the front panel in any area exposed to high temperatures or direct sunlight.
- Do not drop the front panel or otherwise subject it to strong impact.
- Do not allow such volatile agents as benzine, thinner, or insecticides to come into contact with the surface of the front panel.
- Never try to disassemble the front panel.

(Europe Version)

CONTROLS & INDICATORS



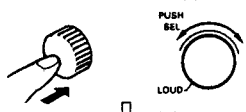
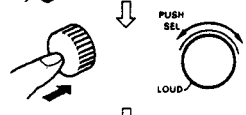
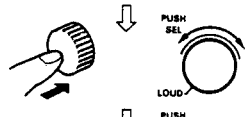
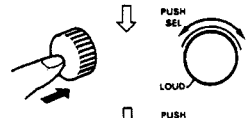
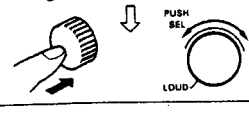
To use the functions marked "•", press the button for over two seconds.

Control knob operation

- The control knob normally adjusts the volume when turned. Press the control knob to switch the adjustment mode in the following order:

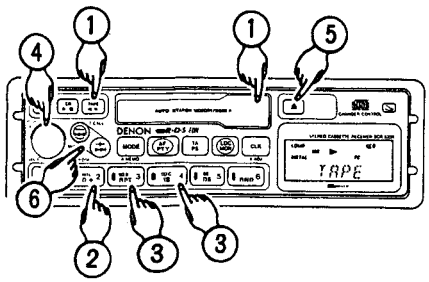
→ Volume → Balance → Fader → Bass → Treble →

- The control knob returns to the volume adjust mode five seconds after the last adjustment has been made.

Turn.	Display examples	Mode	Operation
	VOL 17	Volume	• Turn the knob clockwise to increase the volume, counterclockwise to decrease the volume.
	BAL L+05	Balance	• Turn the knob clockwise to shift the balance to the right side, counterclockwise to shift the balance to the left side.
	FAD F+15	Fader	• Turn the knob clockwise to shift the balance to the front side, counterclockwise to shift the balance to the rear side.
	BASS +06	Bass	• Turn the knob clockwise to increase the bass, counterclockwise to decrease the bass.
	TREB -04	Treble	• Turn the knob clockwise to increase the treble, counterclockwise to decrease the treble.
Press (for at least two seconds).		Loudness	• When this button is pressed for more than 2 seconds, the bass and treble are emphasized, making for a more powerful sound. This can be used to make the sound more listenable at low volume levels.

(Europe Version)

Listening to Cassette Tapes



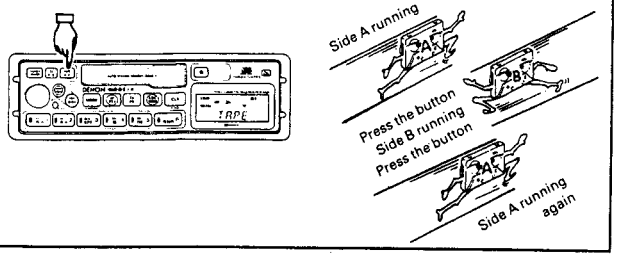
1 Insert the cassette tape. (If a cassette tape is loaded, press the ⏏ button.)
"TAPE" will be indicated on the display.
2 When using metal tapes, press the button. "METAL" appears on the display.
3 Press the button when listening to tapes recorded in Dolby B, the button when listening to tapes recorded in Dolby C.
"DD B" or "DD C" appears on the display.
4 Adjust the volume knob to the desired volume.
5 Press the eject button to eject the cassette tape.
6 Press the button to fast-forward the tape, the following will appear on the display.
"▷ (flash)" for fast-forward in the forward direction.
"◁ (flash)" for fast-forward in the reverse direction.
Press the button to rewind the tape, the following will appear on the display.
"(flash) ◁ ▶" for rewind in the forward direction.
"◀ ▷ (flash)" for rewind in the reverse direction.

- Always remove the cassette tape from the unit when not in use.

Convenient Functions for Cassette Tapes

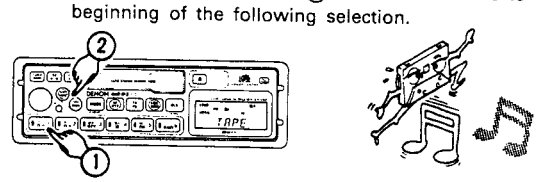
Auto Reverse Function

Press the button for auto reverse. This lets you to listen to the other side of the tape.



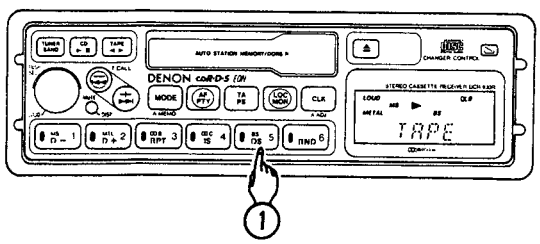
Search Function

1 Press the button and check that "MS" appears on the display.
2 (1) Press the rewind (⏪) button to return to the beginning of the current selection.
(2) Press the fast-forward (⏩) button to move to the beginning of the following selection.



10

BS (Blank Skip) Function



1 Press the button and check that "BS" appears on the display.
2 When a soundless segment of the tape lasts for more than 15 seconds, it will be advanced at high speed to the next track.
3 To stop the BS function, press the button again.

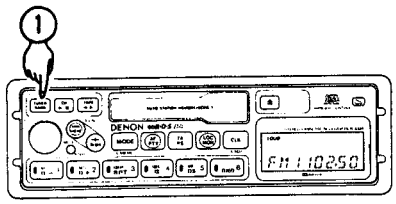
- Blank skip may not operate if there is excessive background noise recorded, as this will not be recognized as "soundless" even when there is more than 15 seconds between tracks.
- If there is a segment recorded at an extremely low sound level which last for more than 15 seconds. (In this situation, Blank skip should be set to "OFF."), Blank skip may operate even in the middle of a recorded track.

11

(Europe Version)

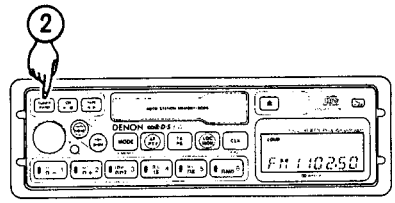
Listening to the Radio

1 Press the [TUNER BAND] button to turn the tuner on.



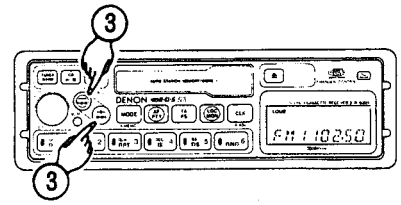
- Press the [TUNER BAND] button for at least two seconds to turn the tuner off.

2 Press the [TUNER BAND] button to select one of the FM or MW (LW) bands.



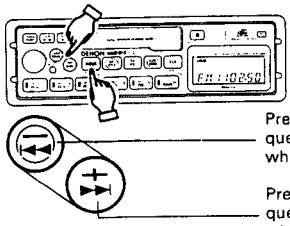
FM1 → FM2 → FM3 → MW1 (LW1) → MW2 (LW2)

3 Use the seek buttons to set the desired frequency.
There are two ways to adjust the frequency, as explained below.



"ST" appears on the display when a stereo broadcast is received.

(1) Seek Tuning



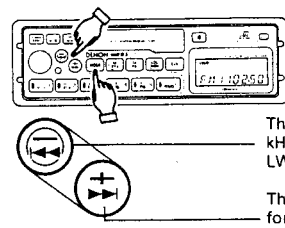
① Press the [MODE] button and check that "SEEK" has appeared on the display.
② Use the seek buttons to adjust the frequency.

Press this button to move to lower frequencies. Tuning stops automatically when a station is found.

Press this button to move to higher frequencies. Tuning stops automatically when a station is found.

Tuning will not stop at stations whose signals are weak. To tune in such stations, use manual tuning.
Note: In the MW (LW) band, the frequency changes as follows:
531 — ··· — 1620 — 153 — ··· — 279

(2) Manual Tuning



① If "SEEK" is displayed on the display, press the [MODE] button to turn it off.
② Use the seek buttons to adjust the frequency.

The frequency decreases in steps of 50 kHz for FM and 9 kHz for MW and 1 kHz for LW each time this button is pressed.

The frequency increases in steps of 50 kHz for FM and 9 kHz for MW and 1 kHz for LW each time this button is pressed.

Note: In the MW (LW) band, the frequency changes as follows:
531 — ··· — 1620 — 153 — ··· — 279

Convenient Functions for the Tuner

Presetting of 18 FM Stations and 12 MW (LW) Station

18 FM stations, and 12 MW (LW) stations can be preset at buttons 1 to 6 then tuned in directly.

Example: Preset 102.5MHz at preset button 1 for FM1:

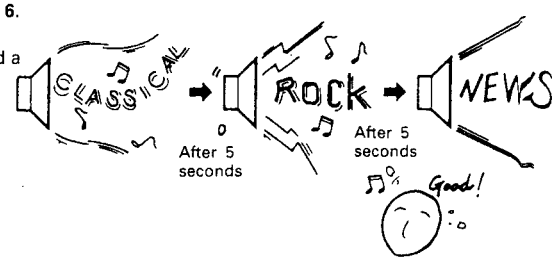
1 Tune in FM1 102.5MHz using the seek tuning or manual tuning method.
2 Press preset button 1 ([1]) and hold it in for at least two seconds.
3 After about two seconds, a "beep" is heard.
4 "CH1" appears on the display. The station is now preset in the memory.

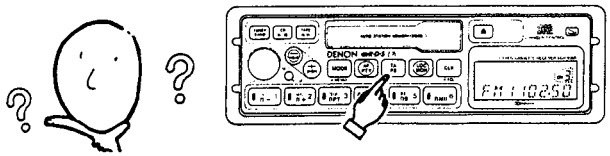
Use this procedure to store other stations. To tune in preset stations directly, simply press the button at which the station was stored.

Presetting Scanning

This function lets you check the stations stored at preset buttons 1 to 6.

Example: When you have preset a classical music station, a rock station and a news station but have forgotten:



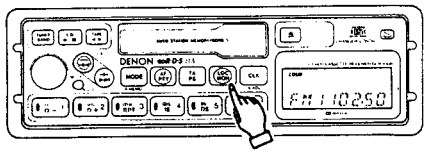


What did I store at preset buttons 1 to 6? Press the [TUNER BAND] button for at least two seconds. The stations are received in order for 5 seconds each.

(Europe Version)

Local Function

Use this to search for only stations with strong signals when tuning in the seek mode.

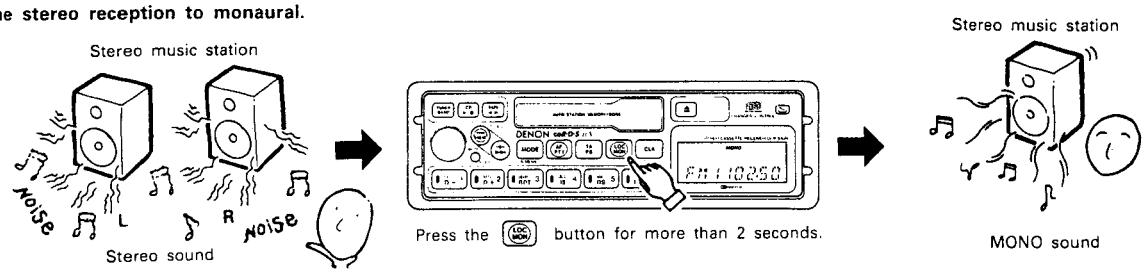


Your DENON Car Tuner is equipped with the most advanced mobile tuning circuitry available. You may also find using the LOCAL button under very high signal strength situations desirable when turning by SEEK mode.
"LOCAL" will be indicated on the display.

- Press the (LOC/MON) button.

Mono Function (Auto/Mono Selection)

This function is used at the time of FM reception when the stereo broadcast is hard to hear or when there is noise interference. It changes the stereo reception to monaural.



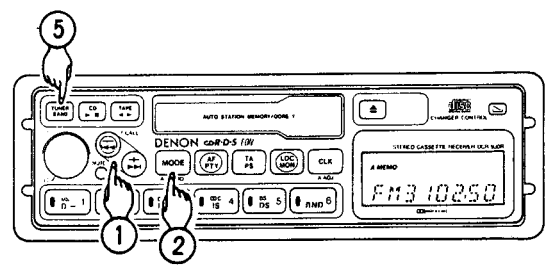
- Even when the MONO button is used, there are occasions when the sound is not improved, depending on the reception conditions.

14

Using the Automatic Memory System

Use this function in areas where you do not know the frequencies of stations to automatically find stations and store them at the preset buttons.
The stations are automatically stored at the FM3 and MW2 (LW2) bands, so if you store the stations you normally listen to at the FM1, FM2 and MW1 (LW1) bands, this function lets you quickly find stations in different areas without clearing the stations you normally listen to.

1 Use the (TUNE/BAND) and (TUNE/BAND) buttons to select the frequency from which you want to start searching.
2 Press the (MODE) button and hold it in for at least 2 seconds.
3 "A.MEMO" appears on the display. The band automatically switches to FM3 for FM, MW2 (LW2) for MW (LW), and the stations with the best reception are stored in order at preset buttons 1 to 6.
4 Once the stations with the best reception are stored for the FM3 (MW2 (LW2)) band, the "A.MEMO" indicator turns off.
5 Use the (TUNE/BAND) button to switch back to the FM1, FM2 or MW1 (LW1) band.



NOTE:
- Stations can also be stored manually for the FM3 and MW2 (LW2) bands. However, when the automatic memory function is used, these stations are replaced by the new stations with the best reception.
- If there are fewer than six stations with good reception, the number of the last preset button at which a station was stored is indicated on the display.
- In rare cases, it may happen that no stations are stored when the automatic memory function is used, due to poor reception conditions, etc.

15

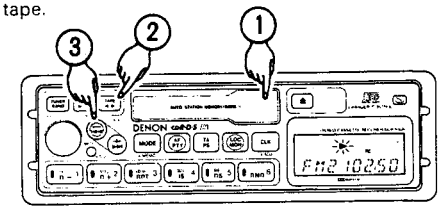
(Europe Version)

Using the Radio on during FF & REW (Tuner call)

Using the Radio-on Function During the Fast Forward or Rewind Operation.

This function allows you to receive FM/MW (LW) broadcasts when you are listening to a tape and you fast forward or rewind the tape. Music will continue (from the radio) when you fast forward or rewind the tape.

1 Load the cassette tape.
2 Press the [TAPE] button for more than 2 seconds. "TC" appears on the display.
3 Press the fast forward or rewind button.
4 Select your desired braodcast station with the [TUNER] button and the ⏩ or ⏪ buttons.
5 When finished fast forwarding or rewinding, the unit will play back the tape.



NOTE:

- When the radio is operating during fast forwarding or rewinding, pressing the [TAPE] button for more than 2 seconds will cancel the function which switches to the radio during fast forwarding or rewinding the tape.
- When "MS" is selected with the [M-1] button (which means during the cuing operation), fast forwarding or rewinding will not cause a switch to the radio.

16

Radio Data System (RDS)

RDS is a new FM broadcasting system promoted by the Europe Broadcast Union. Inaudible control signals are transmitted with the subcarrier to automate FM reception and maximize operating ease. With RDS, the tuner can display the Program Service Name of the currently received station or search automatically for the strongest transmitter signal with the same or any specified program. These features are highly useful also for receiving traffic information or ensuring optimum reception in a car.

RDS Services

The DENON cassette receivers DCR-930R are equipped for RDS broadcast reception and offer the following features:

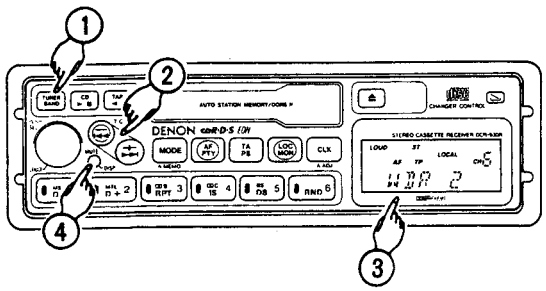
- **Program Service Name (PS)**
  The name of the RDS station currently received is shown on an 8-character display.
- **Program Type Identification (PTY)**
  The DCR-930R includes a PTY function that lets you select a station by specifying the type of program you want to listen to: Classics, Rock Music, etc. PTY then automatically tunes in to a station broadcasting the type of program specified. As many as 31 different user selectable program identifications are provided.
- **Alternative Frequencies (AF)**
  Some RDS stations broadcast the same radio program on different frequencies.
  When the AF function is activated, the DCR-930R will automatically seek out the stronger signal of a station whenever the signal strength changes. This feature ensures stable reception at all times.
- **Program Identification (PI)**
  The PI function permits broadcast station identification. When storing stations in the preset memory, the DCR-930R stores the PI code along with the station's frequency. When a station is then selected and its field strength is unsufficient, the unit automatically selects a station with a higher field strength (and the same PI code).
- **Traffic Announcement Identification (TA)**
  The TA function automatically selects a station which broadcasts traffic information. Even during CD or cassette playback, the DCR-930R will automatically switch to this station whenever a traffic announcement is broadcast.
- **Traffic Program Identification (TP)**
  If the station currently received is one which carries traffic information, the TP indicator on the display lights up.
- **Clock Time (CT)**
  RDS stations usually broadcasts the current time for added convenience. The CT function also lets you easily make adjustments between daylight savings time and standard time.
- **Enhanced Other Network (EON)**
  EON is a one of the new RDS services. If the station currently tuned in provides the EON service, traffic announcements broadcast by other stations can be heared while listening to current station in the TA mode. (The EON service is not offered in some areas.)

17

Using the RDS (Radio Data System)

- The RDS functions are for the FM band only, and will only work on stations that are broadcasting with the RDS service.
- Not all RDS stations offer all the RDS services listed on the previous page. Some RDS stations may only provide some of the RDS services..
- The RDS functions may not work properly when the reception is poor.

PS (Program Service Name) Function



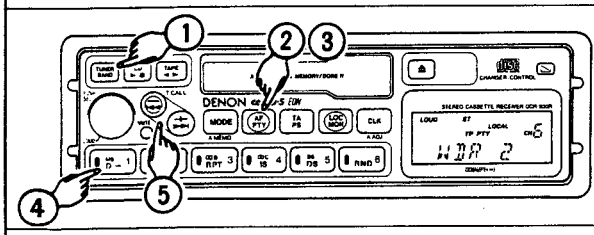
Displaying the PS (Program Service Name) on the display

1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Use the seek/manual up/down buttons to tune in the desired station.
3 After the frequency of the station being received appears on the display, the display switches to the PS (Program Service Name), if the station being received is an RDS station.
4 To check the frequency of the station being received, press the [DISPLAY] button and hold it in for two seconds. The display changes to the frequency. Three seconds later, the PS (Program Service Name) reappears. When in the PTY mode, however, the PTY code appears after the frequency is displayed before the PS reappears.

<Notes on Using the PS Function>

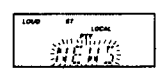
1) The PS (Program Service Name) is not displayed if the station being received is not an RDS station or if its signals are weak.
2) The PS (Program Service Name) is only displayed for the FM1, FM2 and FM3 bands, not for the MW1 (LW1) and MW2 (LW2) bands.
3) The PS (Program Service Name) is always displayed for the FM1, FM2 and FM3 bands.

PTY (Program Type) Function



Use this function to automatically tune an RDS station broadcasting a certain type of program.

1 Press the [TUNER BAND] button and select the FM1, FM2 or FM3.
2 Press the [AF/PTY] button twice, and check that the "PTY" indicator has appeared on the display.
3 Press the [AF/PTY] button for at least two seconds and check that the indicator on the display has started to flash. (The program type mode is selected.)



4 Press the [MEMORY/DOWN] or [MEMORY/UP] button to select the type of program.
- The program type changes each time the [MEMORY/DOWN] or [MEMORY/UP] button is pressed.
- See the following page for a list of the program types which can be selected.

5 Press the [MULTI JOG] or [TUNING] buttons.
6 An RDS station of the type you have selected is automatically tuned in.
- "PTY SEEK" and the selected program type are displayed alternately while a station is being tuned in.
- It is not possible to tune in stations broadcasting the type of program you have selected but not offering RDS services, or RDS stations which do not offer the PTY service. At this moment a "beep" sound is heard.

(Europe Version)

PTY (Program Type) Function

- **Tuning in RDS stations broadcasting a certain type of program using the preset buttons:**

1 Press the PTY button twice, and check that the "PTY" indicator has appeared on the display.
2 Use the above procedure to tune in an RDS station playing the desired type of program.
3 Press a preset button for at least two seconds to store the RDS station at that button. (Refer to Page 13.)

- The PTY code is stored in the memory along with the frequency and the station name.

4 Press the preset button. The PTY code stored in the preset memory is displayed on the display for five seconds.

- If the "PTY" indicator is not displayed on the display, the PTY code is not displayed, and the station name or frequency is displayed.

5 Press the ⏮ or ⏭ buttons.
6 An RDS station broadcasting the type of program you have selected is tuned in.

<Note on tuning in RDS stations using preset PTY codes>

If you have already entered an RDS stations in a preset memory, the unit will remember what the PTY of this station is, and will allow you to tune in another RDS station broadcasting the same PTY code.

Example: If you already have a "NEWS" station entered in preset 4, and you want to find another "NEWS" station:

1) Push PTY button.
2) Make sure that PTY mode is selected and shows on the display. (If it is not, push the AF/PTY button until "PTY" is shown on the display)
3) Push the ⏮ or ⏭ buttons. The unit will search for another RDS station with the "NEWS" PTY code.

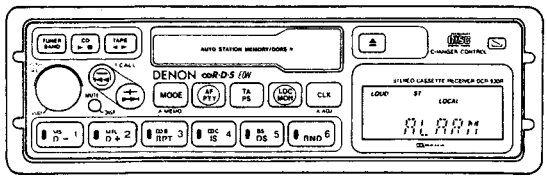
List of PTY Program Types

DISPLAY	PROGRAM TYPE	DISPLAY	PROGRAM TYPE
NO RDS*	(The station being received is not an RDS station or its signals are weak.)	SCIENCE	Science
NO PTY*	No program type	VARIED	Varied
NEWS	News	POP M	Pop Music
AFFAIRS	Current Affairs	ROCK M	Rock Music
INFO	Information	M.O.R. M	M.O.R. Music
SPORT	Sport	LIGHT M	Light Music
EDUCATE	Education	CLASSICS	Serious Classical
DRAMA	Drama	OTHER M	Other Music
CULTURE	Culture	ALARM*	Emergency

* Cannot be selected in the program type selection mode.

(Europe Version)

Emergency Program Reception Function



If the RDS station being received on the FM1, FM2 or FM3 band transmits an Emergency code, "ALARM" appears on the display and a beep tone is heard.
During an emergency broadcast, the volume on the unit will turn up even if the volume knob is set to the minimum. Also, if the unit is in the Cassette, or CD mode, the unit will automatically switch to the radio, indicating an emergency. Follow the instructions being broadcast.

- This function will only work when receiving RDS stations (stations with program service names). In addition, it may not work properly if the signals of the station being received are weak.
- There are no buttons for the Emergency operation.
- This function will only work during actual emergency broadcasts, and will not work during tests of the emergency broadcast system.

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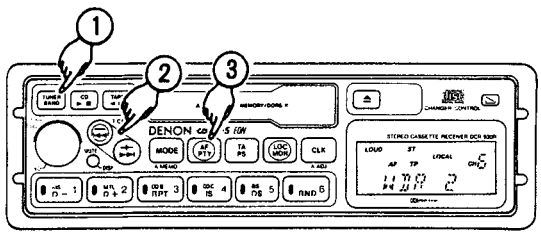
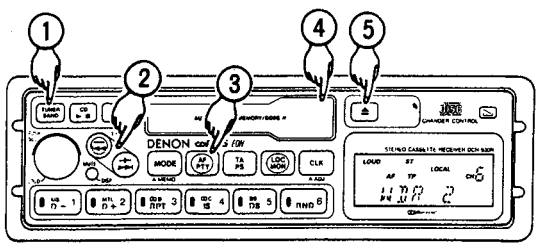
AF (Alternative Frequency) Function



To constantly receive RDS stations broadcasting the same program on multiple frequencies

1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Press the [TUNING] or [SEEK] buttons to tune in the desired RDS station.
3 Press the [AF PTY] button until "AF" appears on the display.

- When the signal strength of the station being received becomes weak, "AF" flashes on the display, and the unit searches for another station that is broadcasting the same program based on the AF code list.
- The frequency changes if another station broadcasting the same program is found.



Automatically tracking stations broadcasting the same program on different frequencies while playing a cassette tape so that reception is optimized when switching back to the tuner

1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Press the [TUNING] or [SEEK] buttons to tune in the desired RDS station.
3 Press the [AF PTY] button until "AF" appears on the display.
4 Insert a cassette tape.

- When the signal strength of the station being received becomes weak, "AF" flashes on the display, and the unit searches for another station that is broadcasting the same program based on the AF code list.
- The frequency changes if another station broadcasting the same program is found.

5 When the [▲] button is pressed, or if the [▲] button is pressed, the radio plays the same radio program as before, using the frequency on the AF code list with the best reception.

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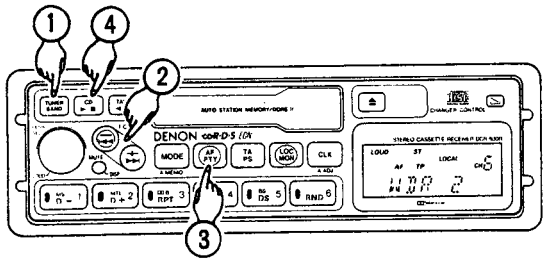
(Europe Version)

AF (Alternative Frequency) Function (When using the optional DCH-700/500 CD-Changer)



Automatically tracking stations broadcasting the same program on different frequencies while using the CD-changer so that reception is optimized when switching back to the tuner

1 Press the button and select FM1, FM2 or FM3.
2 Press the or buttons to tune in the desired RDS station.
3 Press the button until "AF" appears on the display.
4 Press the button and start CD playback.

- When the signal strength of the station being received becomes weak, "AF" flashes on the display, and the unit searches for another station that is broadcasting the same program based on the AF code list.
- The frequency changes if another station broadcasting the same program is found.

5 When the button is pressed, or if the button is pressed, the radio plays the same radio program as before, using the frequency on the AF code list with the best reception.

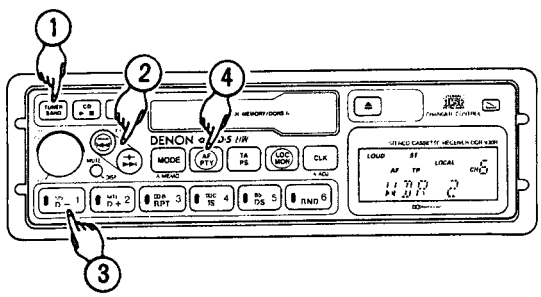
Note: The AF function operates in the same way while playing cassettes.

AF (Alternative Frequency) Function

<Notes on Using the AF Function>

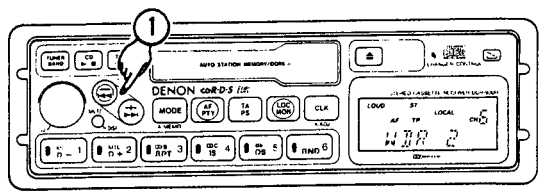
1) With the AF function, the AF button is pressed and stations broadcasting the same program as the station currently being received are searched for based on the AF list. The AF list includes stations broadcasting the same program. If no receivable station is found when the list is checked through 10 times, stations are searched for using the PI codes (codes for stations broadcasting the same program) and a beep tone is sounded. This operation is then repeated. Thus, in areas far from the broadcasting stations, the alternative frequency function may not work.
2) When presetting, both the program name, PI codes, AF list and PTY code are stored along with the station's frequency for buttons M1 to M6 on the FM band.
3) The sound may be interrupted once ever 10 seconds after the button is pressed while the station with the best reception is being searched for based on the AF list. This is not a malfunction.
4) "AF LEV n" (n = 0 to 7) appears on the display if the button is pressed for over 2 seconds. Now use the and buttons to change the value of "n" and the strength of the signals at which the alternative frequency function will begin operating.
The lower the value of "n", the weaker the signals of the station being received must be before the AF function begins operating.
5) "AF" flashes on the display if the signals of the station being received become weak and the data cannot be identified.
6) The AF function may not work properly for RDS stations which do not transmit AF lists.

AF (Alternative Frequency) Function/PI (Program Identification) Function



Storing the AF lists and PI codes in the preset memory

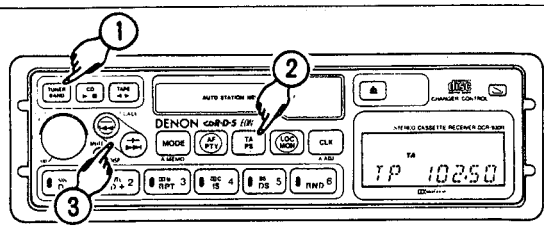
1 Press the button and select FM1, FM2 or FM3.
2 Press the or buttons to tune in the desired RDS station.
3 Press the preset memory button (M1 to M6) at which you want to store that station and hold it in for at least 2 seconds.
4 Press the button until "AF" appears on the display.
5 When a preset button at which the AF list or PI codes was stored is pressed, the AF or PI search operation is performed automatically. The stored broadcast stations and broadcast stations carrying the same content are searched for based on the AF list.



If no new broadcast station with strong signals is found when the button is pressed

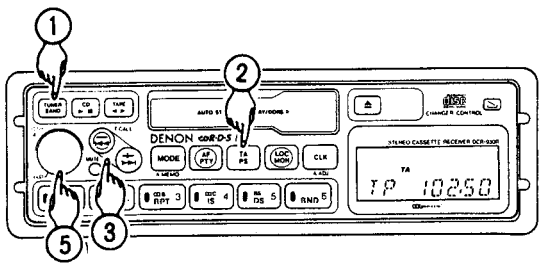
1 Press the or buttons to seek for a new RDS station.
2 Tune in an RDS station.

TA (Traffic Announcement) Function



Searching for TP (Traffic Program) broadcast stations automatically

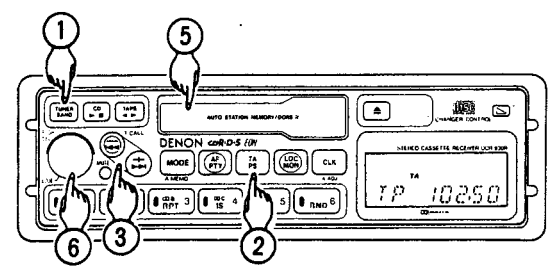
1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Press the [TA PS] button. "TA" appears on the display.
3 Press the ◀◀ or ▶▶ buttons.
4 Tuning automatically stops at an RDS station brodcasting traffic information, or a station providing the EON service with which traffic information broadcast on othe station can be heard and "TP" appears on the display and the TP station is recived.



Setting the volume when a TA (traffic information announcement) starts while in standby (on FM1, FM2 or FM3)

1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Press the [TA PS] button. "TA" appears on the display.
3 Press the ◀◀ or ▶▶ buttons.
4 Tuning automatically stops at an RDS station broadcasting traffic information, or a station providing the EON service with which traffic information broadcast on other stations can be heard and that station is received.
5 When a traffic announcement begins, the volume is set to the level at which it was set the last time a traffic announcement was received (the TA level). "TA VOL" appears on the display if the volume is adjusted at this time.
6 The TA level can be changed by changing the volume when traffic information is being broadcast. Also, when the next traffic information is tuned in, it is played at the previously set volume level.
7 The volume returns to the original level once the traffic announcement is over.

TA (Traffic Announcement) Function



Automatically listening to traffic information announcements while playing cassette tapes

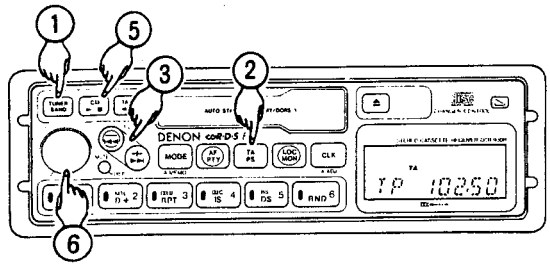
1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Press the [TA PS] button. "TA" appears on the display.
3 Press the ◀◀ or ▶▶ buttons.
4 Tuning automatically stops at an RDS station broadcasting traffic information, or a station providing the EON service with which traffic information broadcast on other stations can be heard and "TP" appears on the display.
5 Insert a cassette tape.
• If a traffic information announcement is being broadcast when the cassette tape is inserted, the tape is not played.
6 Use the control knob to adjust the volume of the cassette tape.
• When the traffic information announcement starts, tape play is set to the pause condition and the set automatically switches to the traffic information.

<Notes on Using the TA Function>

1) With the TA function, the TA button is pressed and stations broadcasting the same program as the station currently being received are searched for based on the AF list. The AF list includes stations broadcasting the same program. Thus, in areas far from the broadcasting stations, the alternative frequency function may not work.
2) A beep tone is sounded when the ◀◀ or ▶▶ buttons are pressed if there is no station broadcasting a Traffic Program or if its signals are weak. If this happens, press the [TA PS] button again so that "TA" disappears from the display, then wait until entering an area in which a station broadcasting TPs can be received and press the [TA PS] button again, then press the ◀◀ or ▶▶ buttons to tune in a traffic information station, or a station providing the EON service with which traffic information broadcast on other stations can be heard.
3) "TA" flashes on the display if the signals of the station being received become weak and the data cannot be identified.
4) Some stations broadcast TA (traffic announcement) signals even when they are not broadcasting traffic information announcements. In such cases, the TA function will not work properly.

(Europe Version)

TA (Traffic Announcement) Function (When using the optional DCH-700/500 CD-Changer)



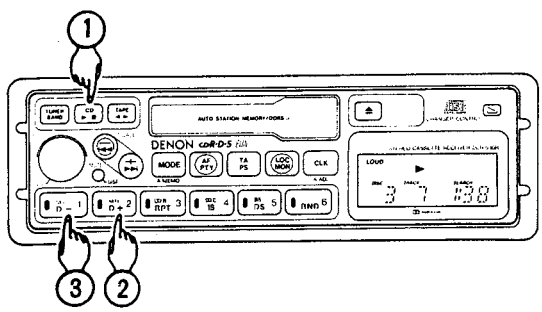
Automatically listening to traffic information announcements while using the CD changer

1 Press the [TUNER BAND] button and select FM1, FM2 or FM3.
2 Press the [TA PS] button. "TA" appears on the display.
3 Press the [▶▶] or [◀◀] buttons.
4 Tuning automatically stops at an RDS station broadcasting traffic information, or a station providing the EON service with which traffic information broadcast on other stations can be heard and "TP" appears on the display.
5 Press the [▶/■] button.
6 Use control knob to adjust the volume of the CD changer.

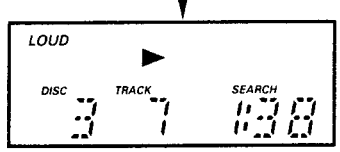
- When the traffic information announcement starts, CD play is set to the pause condition and the set automatically switches to the traffic information.

Note: The TA function operates in the same way while playing cassettes.

CD Changer Operation (Please connect DCH-700/500)



The display reads as follows:



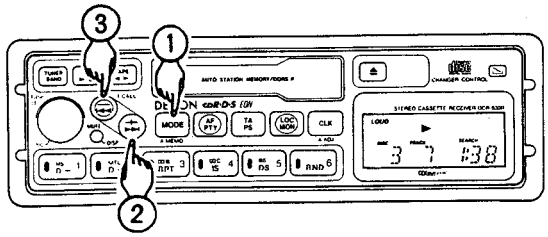
1 [▶/■] CD PLAY/STOP BUTTON
Pushing this button will start the CD play.
The "▶" sign and the currently playing disc number, track number and track time will be displayed on the display.
Pushing this button once again will stop the CD play.

Disc Change

2 Pushing the [n+2] button will advance the unit to the next disc and start the play from the first track.
3 Pushing the [n-1] button will return the unit to the previous disc and start the play from the first track. The number of the changed disc is displayed on the display.

Searching for the Desired Track

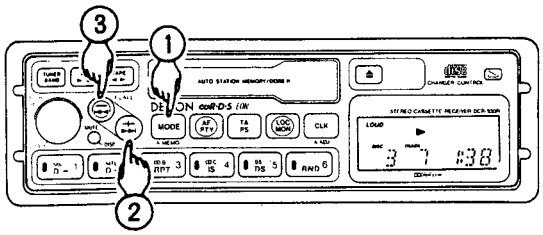
(1) Automatic Search



1 Pushing the MODE button will display "SEARCH" on the display and set the unit to the automatic search mode.
2 Pushing the ⏭ button will find the beginning of the next song and resume play.
3 Pushing the ⏮ button will return to the beginning of the song in play, and resume play.
4 Continuing to push the ⏭ (or ⏮ button) will find the beginning of the next song (or the previous song) and resume play.

- The track numbers of the songs being searched will be displayed on the display.

(2) Manual Search



1 Pushing the MODE button will set the manual search mode and the "SEARCH" display on the display will go out.
2 Continuing to push the ⏭ up button will fast forward the disc.
3 Continuing to push the ⏮ down button will fast reverse the disc.
At this time the sound can be heard at a lower volume than during regular playback.

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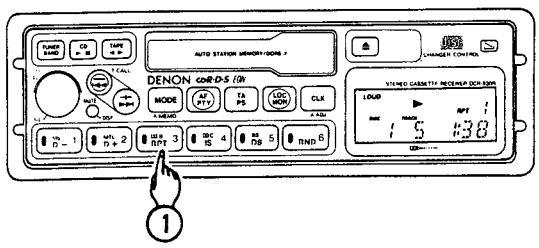
Repeat Play

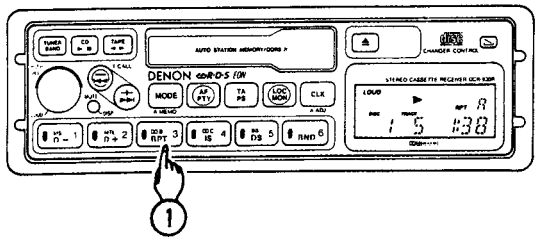
(1) One track



1 Press the RPT 3 button once. "RPT 1" appears on the display, and the track which is currently playing is played repeatedly.
Use this to play a single track repeatedly.

- To cancel the repeat function, either press the RPT 3 button twice, or press another CD changer control button.

(2) One disc



1 Press the RPT 3 button twice. "RPT A" appears on the display, and the entire disc which is currently playing is played repeatedly.
Use this to play a single CD repeatedly.

- To cancel the repeat function, either press the RPT 3 button once, or press another CD changer control button.

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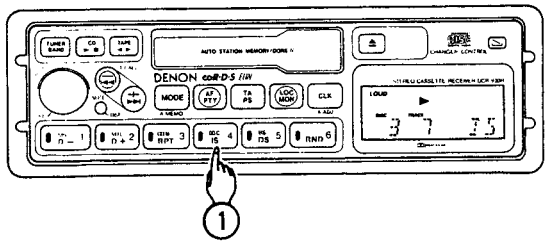
(Europe Version)

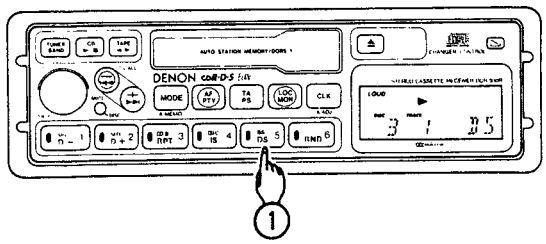
Intro Scan



1 Press the [DISC IS 4] button. "IS" appears on the display, and the first 10 seconds of each track is played.
Use this to search for a certain track.

- To stop the intro scan function, either press the [DISC IS 4] button again, or press another CD changer control button.

Disc Scan

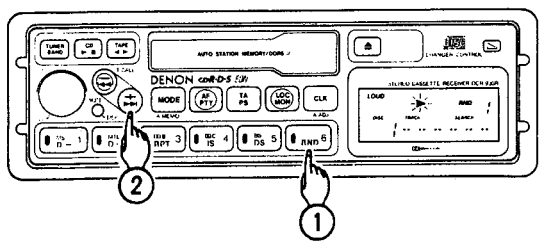


1 Press the [DISC DS 5] button. "DS" appears on the display, and the first 10 seconds of each disc (the first track) is played.
Use this to search for a certain disc.

- To stop the disc scan function, either press the [DISC DS 5] button again, or press another CD changer control button.

Random Play

(1) One disc

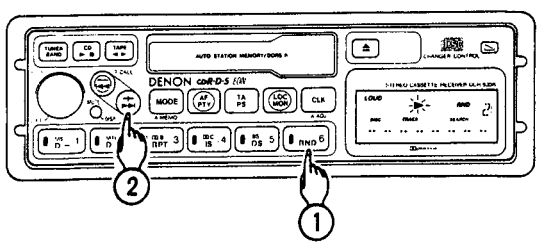


1 Press the [RND 6] button once. "RND ♪" appears on the display, and the tracks on the disc which is currently playing are played in random order.

2 To move to the next track (selected in random order) when in the middle of a track, check that "SEARCH" is displayed in the display, then press the ⏭ button.

- To cancel the random play function, either press the [RND 6] button twice, or press another CD changer control button.

(2) All discs

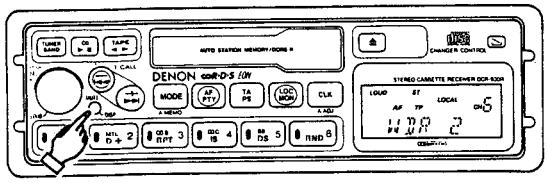


1 Press the [RND 6] button twice. "RND 💿" appears on the display, and all the tracks on all the discs are played in random order.

2 When the ⏭ button is pressed during the automatic search mode (when "SEARCH" is displayed on the display), a randomly selected track on a randomly selected disc starts playing.

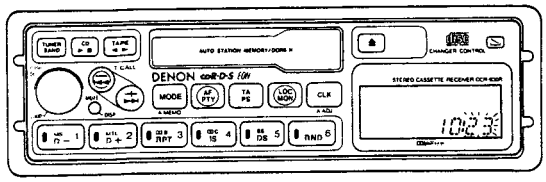
- To cancel the random play function, either press the [RND 6] button once, or press another CD changer control button.

Mute Function



Press the MUTE button causes muting, reducing the sound volume. "MUTE" flashes on the display when the MUTING button is pressed. Pressing the button again cancels the display.

Time Adjustment



Time display: Pressing the CLK button provides a time display for about 5 seconds.

1. Automatic adjustment

1) Press the SOURCE button and select FM1, FM2 or FM3.
2) Press the ▲ or ▼ buttons.
3) Tune in an RDS station.
4) Press the CLK button for at least two seconds. The time is automatically adjusted.

- The time can only be adjusted automatically when an RDS station offering the CT service is tuned in. "NO A CLK" is displayed on the display if the time cannot be adjusted automatically because no CT code is being received.
- Some RDS stations do not offer the CT service.
- Automatic adjustment may not be possible when reception is poor due to the inability to receive the CT code.
- To use the automatic clock adjustment function, the unit has to be tuned to an RDS radio station for an average of 30 seconds before using this feature.

2. Manual adjustment

1) Switch off the unit with the POWER button to press for more than 2 seconds.
2) Press the CLK button for 2 seconds or longer. The Hour display will flash and the time adjustment mode will be set.
3) Adjust the Hour setting with the ▲ ▼ buttons.
4) Press the MODE button. The Minute display will flash and the minute adjustment mode will be set.
5) Adjust the Minute setting with the ▲ ▼ buttons.
6) Press the CLK button again. The time will start advancing from the adjusted time setting.

Note:

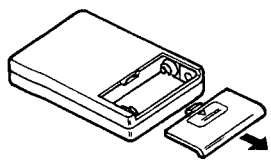
- The time is displayed with a 12-hour display; there is no A.M. or P.M. indication.
- The time cannot be adjusted manually when the set is operating.

• WIRELESS REMOTE CONTROL (OPTION)

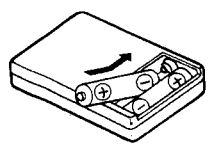
The accessory remote control unit RC-436 is used to control DCR-930R from a distance.

1. Loading the Dry Cell Batteries

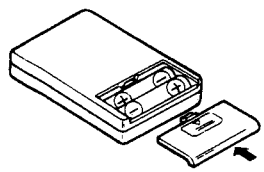
(1) Remove the rear cover on the remote control unit.



(2) Load two R03 (standard size AAA) dry cell batteries as shown in the diagram inside the battery compartment.



(3) Replace the rear cover.



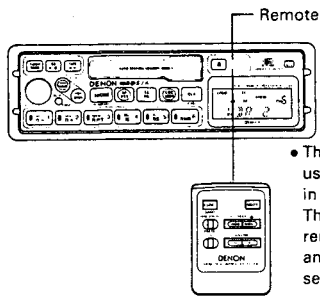
Battery Precautions

- The remote control unit uses R03 (standard size AAA) dry cell batteries.
- The batteries will need to be replaced approximately once a year. This will depend upon how often the remote control is used.
- If the remote control will not operate the In-dash player even if held at very close distance, exhausted batteries may be suspected. Replace the batteries with new ones.
- Load the batteries properly according to the illustration inside the battery compartment. Align the battery polarity (+ and −) correctly.
- Batteries are prone to damage and may start to leak. Therefore:
  - Do not combine new batteries with used ones.
  - Do not combine different types of batteries.
  - Do not jumper the opposite poles of the batteries, expose them to heat or break them open.
  - Do not dispose of used batteries in open fire. Obey local regulations on battery disposal.
- When the remote control is not to be used for a long period of time, remove the batteries from the unit.
- If the batteries have leaked, remove any battery fluid from the inside the battery compartment by wiping it out thoroughly. Then load new batteries.

(Europe Version)

2. **Directions for use**

- Operate the remote control unit while pointing it at the remote sensor on DCR-930R, as shown in the diagram below.



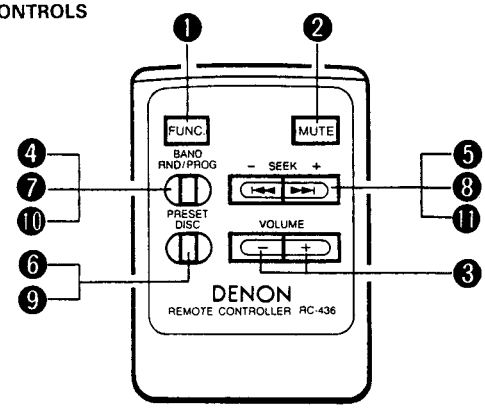
- The remote control unit can be used at a distance up to 6 meters in a straight line from DCR-930R. This distance decreases when the remote control unit is operated at an angle from the remote control sensor.

- Point the remote control unit at the remote control sensor when operating it. DCR-930R may not function if there are obstacles between remote control unit and the remote control sensor, so operate the remote control unit from directly in front of DCR-930R.

Operation Precautions

- Do not press the operation buttons on DCR-930R and the remote control at the same time. This will cause miss operation.
- Remote control operation may be impaired if the Remote Sensor on DCR-930R player is exposed to strong light (for example, direct sunlight)

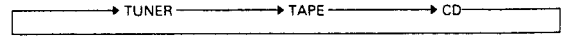
3. CONTROLS



• MAIN CONTROL

❶ FUNCTION button

This button permits switching between tuner, TAPE and CD.



Pressing this button when DCR-930R is off will switch on the tuner. This switch does not have an off function.

❷ MUTE button

Pressing this switch causes muting, reducing the sound volume. "MUTE" flashes on the display when the MUTE button is pressed. Pressing the button again cancels the display.

❸ VOLUME button

Press the [+] button to increase the volume.

Press the [−] button to decrease the volume.

• RADIO CONTROL

❹ BAND SELECT button

This button changes the band. (See Page 12.)

❺ SEEK TUNING button

[⏭] button and [⏮] button provide seek tuning in the direction of a higher frequency and a lower frequency, respectively. (See Page 12.)

❻ PRESET button

This button changes the channels (CH) of the preset memory. This button changes the channels in the order of CH 1 → CH 2 → CH 3···

• CD CONTROL

❼ RANDOM button

Pressing this button provides random playback.

Each press of this button advances the changer in the sequence of RND 1 → RND 2 → Normal Play (OFF). (See Page 33.)

❽ AUTOMATIC SEARCH button

Pressing the [⏭] button provides an automatic search to the next track, whereas pressing the [⏮] button provides an automatic search to the beginning of the track currently being played.

❾ DISC CHANGE button

Pressing this button changes the disc in the direction of a larger disc number.

• TAPE CONTROL

❿ PROGRAM button

Press the [BAND RND/PROG] button for auto reverse. (See Page 10.)

⓫ FF & Rewind button

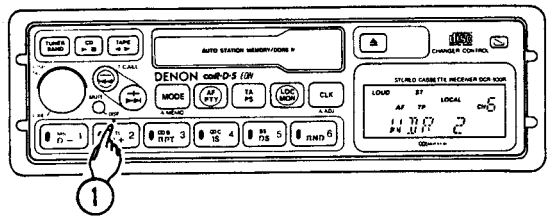
1) Press the [⏮] rewind button to return to the beginning of the current selection.
2) Press the [⏭] fast-forward button to move to the beginning of the following selection.

Notes:

- The remote control unit will function from a distance of approximately 6 meters directly in front of the remote sensor.
- The distance from which the remote control unit will function will decrease if it is operated from an angle.
- The remote control unit may not function if there is an obstacle between it and the remote sensor.
- The distance from which the remote control unit will function will decrease if the batteries are worn.

(Europe Version)

Reset Switch



1 Reset Function
Press the reset switch using the tip of a ball-point pen, etc., when the power supply is first connected or when the display malfunctions due to external interference.

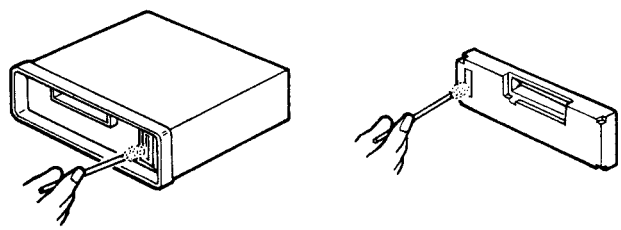
NOTES:

- Everything stored in the memory, including the stations stored at preset channels M1 to M6, is cleared when the reset switch is pressed. The time is also reset to 12:00.
- Do not press the reset switch with a sharp object, such as a metal pin.
- If the problem persists after the reset switch is pressed, contact your Denon dealer or a local Denon service center.

Error Displays
With the DCH-700/500 connected, if any of the following error displays are shown on the display when the unit is operated, carry out the measure indicated in the table.

Error display	Cause of error	Measure
NO MAG.	The disc magazine is not inserted in the changer.	Insert a disc magazine that has been loaded with discs into the changer.
NO DISC	Discs are not loaded in the disc magazine.	Remove the disc magazine and load the discs.
ERROR	The DCH-700/500 does not operate for some reason.	Push the DCR-930R reset switch
HOT	The temperature protection circuit of the DCH-700/500 has operated.	Wait until the temperature drops.
DISC REV	All of the discs in the magazine are upside-down or dirty.	Set the discs properly or wipe off the dirt.

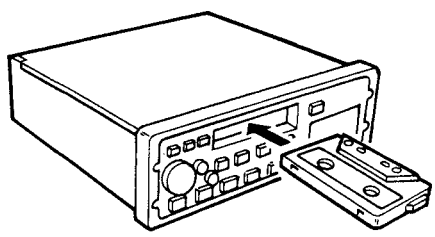
Cleaning



There may be a poor connection at the connector on the panel or on the set if the unit is frequently detached. Periodically wipe the connectors with a cotton swab moistened with alcohol.

* Always turn the car's accessory power supply off when cleaning.

Cleaning the tape head



When playback sound begins to deteriorate, it is time to clean the playback head. Insert a special head cleaning cassette into the tape-loading slot and allow it to run for a few minutes to remove any foreign matter.

For replacement contact your DENON dealer or local DENON service center.

(Europe Version)

SPECIFICATIONS

FM TUNER

• **Mono Usable Sensitivity**	14.8 dBf 1.5 µV (75 ohms)
• **50 dB Quieting Sensitivity**	20.3 dBf 2.8 µV (75 ohms)
• **Alternate Channel Selectivity**	100 dB
• **S/N (Signal to Noise Ratio)**	70 dB
• **Stereo Separation**	40 dB at 1 kHz
• **Capture Ratio**	2.5 dB
• **Image Rejection**	70 dB
• **IF Rejection**	120 dB

AM TUNER

• **Sensitivity (MW)**	30 µV (S/N 20 dB)
(LW)	60 µV (S/N 20 dB)

TAPE

• **Wow and Flutter**	0.09% WRMS
• **Stereo Separation**	37 dB at 1 kHz
• **S/N (Signal to Noise Ratio)**	72 dB (Dolby C NR)
• **Frequency Response**	
– with METAL/CrO_2/FeCr (70 µS tape)	30 Hz to 18 kHz ±3 dB
– with NORMAL (120 µS tape)	30 Hz to 16 kHz ±3 dB

GENERAL

• **Power Output** *1	14 W × 4 ch at 1 kHz with 10% THD
• **Power Output** *2	10 W × 4 ch from 20 Hz to 20 kHz with 0.8% THD
• **Output Voltage – Pre-amp level**	1 V/10 k ohms
• **Bass**	±12 dB at 40 Hz
• **Treble**	±12 dB at 15 kHz
• **Loudness (Vol. –30 dB)**	+8 dB at 100 Hz +8 dB at 10 kHz
• **Remote Output**	12 V 500 mA max.
• **Power Antenna Output**	12 V 500 mA max.
• **Chassis Size (W × H × D)**	178 mm × 50 mm × 172 mm (7-1/64" × 2" × 6-25/32")
• **Panel Size (W × H × D)**	187 mm × 59 mm × 23 mm (7-23/64" × 2-21/64" × 29/32")
• **Weight**	1.8 kg (4 lbs)

*1 Power Output is per channel minimum continuous average power into 4 ohms, both channels driven, at 1 kHz, with no more than 10% total harmonic distortion.

*2 Power Output is per channel minimum continuous average power into 4 ohms, both channels driven from 20 Hz to 20 kHz, with no more than 0.8% total harmonic distortion.

Design and specifications are subject to change for improvement without prior notice.

MEMO